UNIVERSITY OF
ILLINOIS LIBRARY
AT URBANA-CHAMPAIGN
[redacted] RARE BOOK ROOM

Digitized by the Internet Archive
in 2013

http://archive.org/details/centralcatalogsp00milk

CENTRALKATALOGE UND TITELDRUCKE

GESCHICHTLICHE ERÖRTERUNGEN UND PRAKTISCHE VORSCHLAGE IM HINBLICK AUF DIE HERSTELLUNG EINES GESAMTKATALOGS DER PREUSSISCHEN WISSENSCHAFTLICHEN BIBLIOTHEKEN

von

FRITZ MILKAU

PART I.

translated by

JANE WIDNEY BROTHERTON

THESIS

for the

DEGREE OF BACHELOR OF LIBRARY SCIENCE

in the

SCHOOL OF LIBRARY SCIENCE

UNIVERSITY OF ILLINOIS

JUNE 1903.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

1903
B795t

UNIVERSITY OF ILLINOIS

29 May 1903

THIS IS TO CERTIFY THAT THE THESIS PREPARED UNDER MY SUPERVISION BY

Jane Widney Brotherton

ENTITLED Translation of Milkau, Fritz Centralkataloge und titeldrucke

IS APPROVED BY ME AS FULFILLING THIS PART OF THE REQUIREMENTS FOR THE DEGREE

OF Bachelor of Library Science

Katharine L. Sharp

HEAD OF DEPARTMENT OF Library science

Sim

The Rare Book & Manuscript Library
UIUC

CENTRAL CATALOGS

AND

PRINTED TITLES.

HISTORICAL DISCUSSIONS AND PRACTICAL PLANS WITH

REGARD TO THE ESTABLISHMENT OF A UNIFORM CATALOG

OF

PRUSSIAN SCIENTIFIC LIBRARIES.

56721

Table of contents.

Introduction.

Part I.

Historical discussions.

Division I.

The Central catalog.

Introduction.

Chapter I.

The universal catalog and the universal bibliography.

I. Ferdinand Vander Haeghen (1893 and 1895).

2. Richard Garnett (1882 and 1892).

3. The Institut international de bibliographie at Brussels (1895)

4. James G. Barnwell (1877).

Chapter 2.

The central catalog of the libraries of a country.

I. America, Charles C. Jewett (1850). p. 35

2. Italy, Enrico Narducci (1867, 1876, and 1883).

3. France, J. B. Hébert (1848).

4. Austria, Carl Zelbr.

5. Germany

(1) Karl Ed. Forstemann (1842)

and Heinrich Treitschke (1884).

(2) Karl Dziatzko (1884).

(3) Karl Kochendörffer (1884).

Appendix

Other plans.

I. The university catalog, and the universal bibliography.

(1) Martin Schrettinger (1810 and 1829),

(2) Louis Felix Danjou (1845).

(3) Charles Dilke (1850).

(4) Andrea Crestadoro (1856).

(5) Ferdinand Bonnange (1874).

(6) Sir Henry Cole (1875).

(7) Ernest C. Thomas (1875).

(8) Chr. G. Hottinger (1876).

(9) B. Cadwallader (1877).

(10) Wm. F. A. Axon (1878).

(11) Benedetto Salvatore Mondino (1878).

2. The central catalog of the libraries of a country.

(I) England, Lord Seymour. (I854).

(2) Italy.

a. Emmanuele Rocco (I872).

b. Domenico Gnoli (I88I).

(3) France.

a. Plan of the French government of I79I.

b. Plan of the French government of I839.

c. Louis Felix Danjou (I845).

d. Ferdinand Bonnange (I874) and (I896).

Division 2.

Printing in the service of cataloguing.

Chapter I. The printed titles of libraries.

I. England.

(I) The university library at Cambridge.

a. The accession.

b. The main catalog.

(2) The university library catalog at Glasgow.

(3) The British Museum at London.

a. The accession.

b. The main catalog.

(4). The national art library at London.

2.Holland.

The university library at Leyden.

3.France.

(I) The Bibliothèque Nationale at Paris.

a.The accession.

b.The main catalog.

(2) The university libraries.

a.The Catalogue des thèses et écrits académiques.

6.The"Liste des nouvelles acquisitions."

4.Italy.

(I) The Biblioteca Nazionale Centrale at Florence.

(2) The Biblioteca Nazionale Centrale at Rome.

5.Scandinavia.

(I)The university library at Christiania.

(2) The public libraries of Sweden.

(3) The thesis indexes of Upsala,Copenhagen and Lund.

6.Germany.

(I) The Murhard city library at Kassel.

(2) The Imperial library at Berlin.

(3) The Ducal library at Wolfenbüttel.

(4) The public library at Kassel.

(5) The Cologne city library.

7. America. p. 120

(I) The Boston public library.

(2) The Harvard college library at Cambridge.

(3) The John Crerar library at Chicago.

Chapter 2.

Printed titles outside of libraries.

Preface.

Title cards of publishers.

I. Undertakings in the interests of libraries.

(I) The Library Bureau at Boston and the A.L.A.

(2) The Library Bureau at London.

2. Undertakings in the interests of special scientific circles.

(I) The Botanical supply company at Cambridge Mass.

(2) The Office of experiment stations at Washington.

(3) The Répertoire bibliographique des sciences mathematiques.

(4) The Concilium bibliographicum at Zurich.

Closing remarks.

Introductory note.

The suggestions for the present treatise came to the undersigned in connection with his official work in the preparations for the establishment of a uniform catalog of the Prussian scientific libraries. It seems scarcely necessary to mention that nothing has been changed in its character as a private work. Finished provis ionally in the spring of 1896, it has been enlarged during the past year, by the addition of material since published or recently discovered. The reader will pardon if the traces of this revision are not always successfully obliterated.

There still remains for me only the pleasant duty of acknowledgment of assistance, especially from the Royal ministry of religion, education, and medicine, which has supported and advanced the work in every way.

To the foreign and local libraries, which have answered all my questions with unfailing amiability, and to Councillor Hartwig, who with friendly acquiescence has furnished my production a place in this collection, I, again in this place, express my most respectful thanks.

Fritz Milkau.

Berlin, Whitsuntide, 1898.

Preface.

REWORK SLIP

LETTERING NEW COVER	
LETTERING CX	
DAMAGED COVER	
COLOR	
CLOTH SHORT IN WRAP	
CLOTH SHORT IN HEIGHTH	
PRESS COVER	
UPSIDE DOWN IN COVER	
GAUGED OFF CENTER	
BOARDS HEIGHTH	
BOARDS FRONT	
GROOVES SPLIT	
GROOVES DAMAGED	
HINGES SPLIT	
HINGES TORN	
HINGES LOOSE	
STRIP BIG	
STRIP SMALL	
COLLATION	
END SHEETS TORN	
END SHEETS WRINKLED	
TEFOIL	

ing manner,the editor of this collection once demon-
that the task of establishing the central catalog
a large or small state is a question for the minis-
finance to solve and at the same time gave the true
state of affairs,namely,that the idea,in spite of its
nd numerous manifestations of life,thus far has reached
nd the state of an academical discussion.
undertaking of the French government,which was frustr-
favor of the times at the close of the preceeding
the most recent years,there has been no success in
make use of the power of the state altho the advantages
tion promises,are so great and clearly evident.
,only quite recently,proved how much greater a service
atalog of the most important Prussian collections would
possible with the index of the Bibliothèque Nationale
means the richest library in the world,the central
ry of a great state,which in the formation and executi-
of centralization,has stood alone for centuries.
hat one can draw conclusions as to what advantage a
t such a surpassingly all powerful central library,but
large book collection,which is growing and cared for by
,could expect from the collection of these treasures
lized catalog.
e and joy is to be hailed the fact that the Prussian
s undertaken to bring the question from the realm of
active being.In the budget for 1895-96 there was laid
...e Diet the plan of making a central catalog in the Royal
library of Berlin,the university and other scientific libraries of

Preface.

In quite a striking manner, the editor of this collection once demonstrated the fact that the task of establishing the central catalog for a library of a large or small state is a question for the ministry and board of finance to solve and at the same time gave the true reason for this state of affairs, namely, that the idea, in spite of its venerable age and numerous manifestations of life, thus far has reached but little beyond the state of an academical discussion.

Aside from the undertaking of the French government, which was frustrated by the ill favor of the times at the close of the preceeding century, even in the most recent years, there has been no success in the attempt to make use of the power of the state altho the advantages which its execution promises, are so great and clearly evident.

Leopold Delisle, only quite recently, proved how much greater a service to science a catalog of the most important Prussian collections would render than is possible with the index of the Bibliothèque Nationale alone. And this means the richest library in the world, the central national library of a great state, which in the formation and execution of the idea of centralization, has stood alone for centuries.

According to that one can draw conclusions as to what advantage a country, without such a surpassingly all powerful central library, but possessing a large book collection, which is growing and cared for by their methods, could expect from the collection of these treasures into a centralized catalog.

With gratitude and joy is to be hailed the fact that the Prussian government has undertaken to bring the question from the realm of dreams into active being. In the budget for 1895-96 there was laid before the Diet the plan of making a central catalog in the Royal library of Berlin, the university and other scientific libraries of

the existing collections of books on the basis of the present loan system rendering the possessions of each individual library easily accessible to all the others.The university and board of finance agreed to put the undertaking on a secure footing;it remained for the professional men to suggest a plan for its fulfillment.It is self evident that this can be done only on the basis of a thorough examination into all existing productions in these domains.

The task as has been said is not new;but since up to date none of the many methods for the attainment of the same goal has had an opportunity of proving its practical utility,one seeks in vain for an example, which furnishes an unreserved precedent.

In I88I the British Museum began printing its catalog from purely practical considerations,which were limited to the boundaries of the institution.In the requirements for printing,never has there been a word about including in the one index an inventory of merely the other London libraries so far as they could demand such consideration because of their importance.

On the other hand the commission,whose duty it was to advance an opinion in regard to the publication of the catalog of the Bibliotheque Nationale,emphasized in their recommandation for printing the common interests of science and the plan of including the other book collections in Paris was dwelt upon,but the very justifiable hesitation.that these indexes as yet unprepared,would endanger the whole work led them to limit it to one library.

Thus in its significance as well as in its final aims,the contemplated work is related to both undertakings in London and Paris,and however much can be learned from them in regard to the arrangement and printing of the prospective catalog,still the establishment of a general index of a number of libraries whcih are scattered over a

wide area demands with special needs another working plan than that of the publication of the catalog of a single collection, tho it alone may be worth more than the others together.

But the execution of a central catalog, practical up to the present for indexing, can not be regarded as a model on account of its restrictions to a strictly limited literature or current accessions, in spite of its close relationship as to methods.

Sooner might the collection of all the indexes of the numerous libraries of the institutions (in Berlin there are fifty with eighty five thousand volumes altogether) made in Berlin and Bonn 1892-97 be drawn into a common central catalog.

The difference still in the range and difficulty of the tasks solved in the one case and still to be solved in the other, is so significant that the ways and means must naturally differ in the two cases.

Out of this need for practical experiences, which would be of use in the organization of the prospective task, arises the necessity of returning to the prolific source of theoretical discussions concerning the central catalog, in order to discover gradually the most accessible way by testing the working plans there developed and by a critical elimination of clearly unsuitable proposals.

As contrasted with the compilation, the printing of a central catalog is nothing more than that of any index similar in scope.

For the production of the plan, never yet realized, a glance over the work of the printing press in the service of cataloguing is naturally added. Only if these preliminary studies have led to a complete elucidation of the method and scope of the task, a verdict as to the method of putting it into practice may be possible.

Part-I.

Historical discussions.

Introduction.

Central catalog.

According to the character of the present task, strictly speaking, only the plans for a central catalog can be considered as a scheme reckoning on existing library conditions and patterned according to the immediate need of the libraries. The ever recurring plans to unite the numerous existing bibliographies of a very strong collection of the literary productions of a single country or the world, as well as the bibliographies still to be issued, shows a close relation to the scheme of cooperation in various lines of library work.

In spite of the varying aims, those efforts show, especially as far as they are of value for universal bibliography, features worthy of consideration for our undertaking also.

This has moreover the implied or expressed purpose of supplanting the existing library catalog. Therefore it will not be strange to find it represented here beside the universal catalog with a couple of the most recent examples.

With few and for this reason notable exceptions, the originators of the centralizing plans, whether they desire a catalog embracing several libraries or the combination of innumerable seperate bibliographies into a single comprehensive index, do not show the same know ledge of their predecessors, which would enable them to clarify and strengthen their own conceptions.

Little can be expected therefore from an attempt at an historical development of the idea. For this reason a symposium of their manifold utterances is disclaimed, especially as many of them insist merely on a limit as to the goal.

If here as elsewhere, each one stood on the shoulders of his predecessors, it would be of practical interest to trace the idea to its very source. But under existing circumstances it is quite unimportant whether the universal repertorium, justly or unjustly can be traced back to Conrad Gesner (1545), whether Gabriel Nandé, (1627) and Gerard Langbaine (1651) really were the first to give public expression to the idea of a central catalog, in its widest as well as its most restricted sense, and how many finally after them have brought to light the forgotten idea again and again.

The very recent examples show most clearly the incoherence of all these efforts. A few days after the first international bibliographical conference in Brussels, the members of the "Association artistique et littéraire internationale" at their Dresden congress twenty fourth September 1895, led by Jules Lermina of Paris, determined upon the establishment of a universal index of all works of science, literature and art which have appeared or will appear the world over, and it would be wonderfully strange if the century about to close does not see the same utopia proclaimed with equal enthusiasm at least once more.

For the selection presented in the following pages, this principle has been decisive that among all plans, those are of the greatest value which are concerned, not with mere suggestion as to the method of procedure, but those which seek to enter as far as possible into the details of the work in question.

Chapter I.

The universal catalog and the universal bibliography.

It seems a reversal of the actual state of affairs when William F. A. Axon in his short sketch of the universal catalog maintains that the first question to be answered would be that of its possibility. If this must be answered in the negative then it would be useless to discuss its advantages. Quite the contrary. Here as with every other work it is the right of existence which must first of all be demonstrated before one can observe the ways and means for its execution. And this is the chief fault of all plans for a universal catalog that they make light of this proof and usually represent the advantages of the undertaking as axiomatic, while it should be their prime task to convince the world that work and profit here stand in proper relations to each other. Only if that is successful, is the universal catalog then a question of time.

But the execution of this preliminary condition becomes more difficult every year, in the same ratio as the undertaking itself, whose wide range is extended by every new year of literary production.

As to the possibility of the universal catalog no man of sense has ever doubted. But the real hindrance lies as Edwards has already stated, not in its infeasibility, but in its doubtful value.

I.Ferdinand Vander Haeghen.

One might give up all skepticism,when one sees with what great and noble enthusiasm a man like Vander Haeghen the founder of the Bibliotheca Belgica,favors the universal catalog. Even if prejudiced from principal against the idea,one will not without an active interest note the way in which on the fourth of December,1893,he placed before the Belgium academy the plan of his newly recommended project and on seventh May 1895,sketched it out before the same body.His plan of organization,which is here given in full gives us exhaustive information.

I.For the establishment of "Generalkatalogs der öffentlichen Bibliotheken an international bureau is to be established.

2.The bureau is to have its office in...

It will be assigned to the best known library in the city.

3.It will consist of a director,secretary three assistants and a messenger.The salary of these officers will be fixed at... An order of business will regulate their powers and the progress of their work.

4.The catalog will be made on cards,Every card will bear after the name of the author,the exact title of a work and its different editions with a statement of the libraries,which possess it, corresponding to samples agreed upon.

5.The eatalog is to be strictly alphabetical.

6.The bureau provides for the writing and printing of the titles, and sends the cards in corrected proof sheets to the subscribing libraries.

7.The administration of these libraries states upon the cards sent them whether.

(a) the given editions are found in their collection.

(b)they possess still other editions.

The cards are to be returned at the latest two weeks after their receipt.

8.Each of the subscribing libraries will have five copies of the completed catalog cards.

9.At the beginning of each year the director of the bureau will give the government of the subscribing countries a report concerning the work conducted during the past year and the progress of the general catalog.

IO.Private libraries which are prominent either because of the number of volumes,or the value of special collections,can join the international bureau thro the participation of the government of their country under the same conditions as the public libraries,and share in its publications.

II.The subscribing libraries reserve the right to be entitled to the intervention of the bureau in written communications with all the libraries concerned in the agreement.

I2.For the acquisition of bibliographical information,scholars are freely granted permission to correspond directly with the Bureau.

I3.An annual sum of .... will be set aside for the current expenses of the bureau, as the purchase of books and needs of the Bureau,printing,postage and so forth.Besides a preliminary credit of .... will be granted it for the acquisition and arrangement of bibliographies.

I4.The expenses of the bureau will be born in common by the subscribing states and be proportioned according to the number of public or private libraries which order the catalog cards.

Instead of entering into the details of this plan ____(for a criticism of its working organization reference may be had to Dziatzko's plan)_____ I should like to direct attention for a minute to the future,which sees before itself the realization of Vander Haeghen's idea.

In this first communication to the Belgian Academy,the Ghent head librarian cast aside the British Museum catalog,saying that it, completed,would contain only a very small portion of the library treasures of Europe alone.At any rate, according to Garnetts'calculations,the catalog of this small fraction would embrace 3,5000,000 articles;if we leave out of consideration the greater portion as references,to whose acceptance the British Museum believes itself pledged thro the absence of a aystematic catalog;still including maps and music ,we have remaining I,500,000 actual titles.

Naturally estimates like the following can be made only at random, for no land has at its disposal a complete bibliography of its literature;however we will estimate rather too low than too high,if we estimate an exhaustive index of the treasures amassed in European libraries alone at 4,000,000 titles.

Now the question presents itself.Will the profit to a large library, which the possession of this index may bring to it,stand in especially acceptable relations to the great burden of labor,which will accrue to it from the comparrison,admission,and arrangement of these million title cards?

The Brussels Academy,altho after long delay,finally has accepted the plan submitted to it and presented it to the government.Two years have since passed without bringing any details concerning its fate before the public.Presumably it has fallen a sacrifice to the propoganda of the International Brussels Institute,

which was inserted only after heated debate. For both undertakings it is self evident there is no room in one land; furthermore, it would not be at all remarkable, if here, where the recruiting strength of the plans depends upon the laity, the situation would have to be met with respect to limits by no means more secure or discreet.

2. Richard Garnett.

Even in his first report concerning the printing of the British Museum catalog, Garnett implies that the publication of this catalog would create for the adherents of the universal catalog a basis of operation as yet entirely lacking. As yet their plan was utopian, but let the catalog of the museum become commonly accessible first thro printing, then it would be possible to fill out these gaps from the catalogs of other libraries and so attain the great goal in long strides. Ten years later in September 1892, Garnett again submitted this plan to the conference of English librarians in Paris. As can scarcely otherwise be expected from him, to whom the direction of the printing of the London catalog has offered rich opportunities to become practically acquainted with the difficulties of such undertakings, we find in his achievements nothing of the security and certainty of victory with which in more recent times we have been accustomed to see the champion of far more extensive plans step before the public. It is not the usual enthusiasm for the universal catalog, with which we have to do here, but a salutary, calm exposition concerning the solution of the problem. The universal catalog, Garnett thinks, has as things now are only a possibility. Among the printed catalogs existing at the time, that of the British Museum most nearly approaches the desired completeness. Only on this basis can the powerful structure be erected, thro the common effort of all the rest of the

important libraries, which would make known their possession at a central office for publication as far as these are not included already in the British Museum catalog, either in separate supplements or in connection with the index laid down as a foundation. The difficulties are indeed great. To begin with, the British Museum catalog is not extensive enough to be able to take the work in hand. But besides all this, it is incomplete for its printing has required a great many years and so the new additions, in so far as they are connected alphabetically with the published volumes, have not met with favor. Very essential above all is the reprinting of the catalog and its distribution to all libraries concerned. It is a matter of prime importance therefore to arouse the government to an appropriation of the necessary means. If this succeeds, then the problem remains to draw all large libraries into participation, to procure from them the necessary financial support, to obtain the necessary unity in the treatment of a mass of technical questions and finally to establish and endow the central office which would attend to the revision, arrangement and publication of the material streaming in from all sides.

Garnett is, as he himself states in conclusions, by no means so sanguine as to think of a speedy conquering of these difficulties of organization, without telling us freely, that he especially hopes, the public participation will reach the force necessary to enter upon the undertaking, supported by a safe outlook as to results.

If this time ever really comes, it will still be in the distant future. Thus far scarcely more that two or three nations have been successful in reconciling only the official libraries on questions of cataloguing.

And this difficulty would be the easiest to overcome. But where could the libraries even now already overburdened with their constantly increasing tasks derive the necessary strength for this new work? According to the rate given as an estimate of the work for the establishment of the Prussian cooperative catalog, the Berlin Imperial library would need eight thousand working days of an officer in order to compare their present collection with that of the British Museum if the catalog, ___ which really is not the case _____ had the same plan of arrangement as their own. But this collection is growing quickly and steadily, and the comparison of additions demands new work, which should never come to a standstill, since the whole undertaking here could be of value, only upon the condition that it would be carried on forever. Therefore it is not evident why the new edition of the English catalog laid down as a basis for the universal catalog should be demanded together with the reference to the incompleteness of the first edition, for the reprint would require probably twenty years more and a large portion of the accessions not be taken into account. But finally the universal catalog made on the proposed plan would solve the problem only imperfectly, for it would always specify for every work only one library in whose possession it would be found and indeed for the majority of the books only the British Museum, which permits the use of its treasures only within the library,

3. The International Institute of bibliography in Brussels.

Eight years ago both of the Brussels advocates, Henri La Fontaine and Paul Otlet met in the same aim; namely, to organize according to modern plans the bibliography of their sphere of research, jurisprudence and political science. But for only a short time did they abide by this limitation, soon extending their program endlessly. They were convinced that the inadequacies experienced, the lack of system and extravagance of the working power is to be regretted by no means in bibliography alone, and so in their efforts in search of a fundamental cure of the evil came upon the most audacious and comprehensive of all bibliographical plans, to a universal repertorium.

The greater the compass of a bibliography and the wider the circle which it is to serve, the more momentous for it become the questions concerning the arrangement of material. That in such a catalog numbering a million titles the alphabetic arrangement could not be followed solely, that rather in their arrangement far more stress must be laid upon the subject of the writings, there could be no doubt from the beginning. The discovery of the best method of doing justice to this side of their task presented itself to them as the most urgent of their preliminary work.

The study of the complicated fullness of scientific and bibliographical divisions led them finally to a system whose "Charming simplicity" and wide range captivated them in like degree and which seemed to give into their hands the means for the solution of the whole problem; Melvil Dewey's Decimal classification.

The investigation made in America confirmed fully their favorable opinion; in spite of this they felt themselves pledged to test in a practical work the utility of the Dewey classification. With this design they evolved their plan with the aid of friends and with the support of the Belgium government, the Office international de bibliographie and not before the arrangement of 400,000 titles had fulfilled their expectations in all respects, would they regard the time as having come to summon the world into cooperation. The invitations were sent out and on second September 1895, the first international bibliographical conference was held in Brussels.

Enthusiasm found unwontedly glowing expressions for praising the attainments and placing the future in the brightest light.

Here a simple review of the resolutions must suffice; that the right of the conference to call itself international was quite doubtful, matters little,

1. The conference is of the opinion that the decimal classification furnishes most satisfactory results from a practical and international point of view.

2. The conference sanctions the favorable vogue, which the Dewey system has already won and recommends its unaltered acceptance in order to facilitate the speedy establishment of an international agreement.

3. The conference desires the cooperation of the governments for an international bibliographical association, (Union bibliographique universelle) with a view to the establishment of an international bibliographical office.

It instructs their bureau to submit this desire to the Belgium government with the request that they take all steps apparently useful for this purpose.

4. The conference votes for the erection of an international bibliographical institute. (Institut.)

5. The conference in consideration of the circumstances that every systematic arrangement presupposes the existence of a complete and reliable national bibliography, draws the attention of the government to the importance of a uniform copy-tax law.

6. The conference expresses the wish that the government might insist upon the acceptance of the decimal system, if they consent to the support of a national bibliography.

7. The conference desires that bibliographies from private sources and especially catalogs issued by booksellers also adopt the decimal system.

8. The conference desires the common acceptance of the plans, adopted by the Association francaise pour l'avancement des sciences at the assembly in Bordeaux August 1895, concerning the key words given by authors for the titles of their works.

9. The conference draws up in its official report the declaration given by Monsieur La Fontaine and Otlet in their names and those of their associates as desiring to give without remuneration their repertory of 400,000 titles to the international bibliographical office to be formed by the state. It thanks Messieurs La Fontaine and Otlet for their initiative and for their generous gift.

IO. In anticipation of the final establishment of this office, the conference petitions the office now active at Brussels to carry on its labors on the basis of a vast international cooperation. It desires especially the speedy translation of the tables of the Dewey decimal system into, German, French, and Italian.

This is what the conference about to be established had to say. Who would be able out of these remarks of theirs without anything further to fathom the plans which really had led to their convening, the idea of a universal bibliography. To such an extent had the allurements of Dewey's system captivated them, that they pushed into the extreme foreground the system to which under any circumstances only secondary notice is due, laying great stress on its servicable value and even today in spite of all warning voices in Brussels, the Dewey formula is the open sesame before whose magic power the doors which today keep the investigator from the boundless wealth of the worlds literature, will open. So it has come to pass that with absolutely startling neglect of all foresight, the connection with the universal repertorium is made dependant to such a degree on the acceptance of a system once selected that the one stands or falls with the other. But how slight the prospects of the dreamed of triumph of this system are, we shall soon see.

First there is still s little to be said concerning the program itself which may not be clearly developed, not indeed from the commonly regarded laws of the Institute founded by the conference, but rather from Messieurs LaFontaine and Otlet's preliminary note.

The task of the Institute is the study of all questions which bear on bibliography in general and on the execution of the universal repertorium in particular, or more clearly expressed, the improvement and internationalizing of the Dewey system with all the means of

propoganda for its pursuance for the purpose of the facilitation and speed of this great work. But to the office in whose ultimate acceptance the administration itself should acquiesce is the role of expurgating office alloted; the establishment and publication of the universal repertorium falls to it also.

By this universal bibliographical repertorium one understands a catalog of all the literature of all nations and all times, in which the serial publications and the seperate publications of society transactions shall be included as well as independent books and pamphlets. It should be made alphabetical as well as classt, and in its final form ~~passes~~ the capability of being kept up to date; in other words, be kept on cards. No large city, no center of intellectual life would be able to do without this repertorium.

It should be incumbent upon each office, whose individual divisions should be directed by specialists for each branch of knowledge, to sift first of all the bibliographies already collected and then new material daily coming in from all quarters, to assign to each title its place in the system of classification and then to distribute the printed slips to the subscribers, especially to the local bibliographic offices (Offices bibliographiques locant) established everywhere.

These would be assigned to the large libraries where they would correspond soon to the expensive and still infrequent catalog systems. Moreover the classt arrangement of the cards would permit one to distribute the repertorium to ones liking and in single instances to yield to special interests. Its first principal would be the maintenance of the office in a powerful association, in which organization all the others would join, and with which the achievement of the universal repertorium must rest;

this association would include state and public administrations, learned societies, libraries, publishers, authors and scholars.
The governments must hold themselves pledged to provide for a regular registration of the publications of their countries and still further to promote the undertaking by subscribing to a number of copies in proportion to the size of population and the literary activity of the year. So much for the aims. Two years have passed since they were announced. What has been reached practically thus far?
Fortunately they have not waited for the world wide bibliographical union, in order to place the office on a firm foundation. The Belgium ministry of the Interior and of Public Instruction which already has taken the temporary office and the conference under its protection set a good example for the remaining governments and recommended to the King the official sanction of the office in order to secure an institution for the country which could become, à brève échéance l'organe principal de la vie intellectuelle des peuples.
On the twelfth September 1895, the King signed the act creating the office of international bibliography which at the same time secured the necessary quarters and financial support for the undertaking.
The other governments seem to remain in the background; at least there is beside the Belgium government only one Swiss canton, to whom the second conference, held from the second to the fourth August 1897 has had occasion to express its sense of obligation. This lack of active cooperation nevertheless has not prevented the office from displaying a surprising activity. In the quarters which have been assigned to it in an annex of the Imperial library in Brussels, printed catalogs and bibliographies have been broken up in the customary manner by clipping and pasting on single title slips, and a large number of scientific assistants are engaged in classifying these according to

the Dewey tables.The 400,000 cards,the gift of La Fontaine and Otlet are a long since exploded theory.When the members of the second conference visited the office they were able to assert that the repertorium already had grown to more than two million titles,of which more than half were already classified.They investigated its separate parts in detail and could not refrain from repeated loud expressions of surprise and praise concerning the work already accomplished."
Even a bibliographical Service is organized already.The Institute receives questions and answers them as well as the unfinished condition of its collection of titles permits,while it places at the disposal of those interested the manuscript titles for reference purposes in the repertorium.For the first five cards,there was a fixed minimum tax of one franc levied;each extra card costs one tenth of a franc. When the number of titles provided exceeds fifty (five and one half francs) the questionnaire will be informed thereof for the avoidance of undesireable surprises.While the work of the "Retrospective bibliographie" is of value-(there is no German phrase covering the idea-), as complimentary to these for mastering new facts a number of periodical publications have been called into being and others for limited purposes have been used for the advancement of the Institute.
They bear the common main title"Bibliographia universalis,publication coopérative de l'office international de bibliographie" and all maintain the same principle altho they issue from various circles; that is in the main they give every title the Dewey number.
They are to be regarded as integral parts of the universal repertorium and appear partially in card form (as the publications of the Concilium bibliographicum at Zurich and of the American library association for which the reader is referred.to the statement in the chapter on printed titles;)

partially on sheets printed on one side, the Bibliographia unversalis today (middle of 1897) includes besides the publications already mentioned the following:

Bibliographia bibliographica (published since 1897 by the institute.)

Bibliographia philosophica (published since 1895 by the Institut superieur de philosophie of the university of Lyons)

Bibliographia sociologica (published since 1895 by the Bureau sociologique of Brussels).

Bibliographia astronomica (published since 1896 by the Société Belge d'astronomie at Brussels, which appears also in card form.

Bibliographia medica italica (published since 1897 by the periodical, Il Paliclinico at Rome.

Bibliographia ostetrica and ginecologica italiana (published since 1897 by Societá Italiana di ostetrica e ginecologia at Rome) and Bibliographia musicalis italica (published since 1897 by the periodical L'insegnante di musica at Rome); a number of further unions are about to be established. Likewise as a result of the Institute it may be estimated that a number of journals will be prevailed upon to classify their articles with the Dewey numbers.

On the whole it is, when examined closely, but little in comparison with the enormous scope of the task, but in itself and especially considering the short space of two years, it is a very creditable showing, so that whatever his doubts as to the utility of the entire undertaking, one can not refrain from wishing it a more prosperous future than to all appearances has been allotted to it.

Indeed the heads of the Brussels movement in favor of the Dewey classification have produced in the quiet domain of bibliography an unheard of agitation both verbal and written, so that an enumeration of the pamphlets, serial publications and notices of the daily press,

which their energetic propoganda has called into being and daily increased, would fill many pages. But however numerous the new adherents may be, who are won to the system thereby, the result dwindles greatly when opposed to the negative attitude, which those circles most influential and most capable for judging, are, with few exceptions, maintaining. Two reasons were advanced which should make the acceptance of the Dewey system imperative; first, its unlimited capability of expansion, the international intelligibility of its numeral system, which enables it to render the same service to knowledge as did the Latin language in the Middle Ages, in short its preeminence reaching to the acme of perfection, and second, the fact, Otlet has asserted it, that the system is used already in more than a thousand American libraries. Whatever can possibly be said of any movement has been repeatedly said and here there is no possibility of opening the battle anew. The inadequacy of a bibliographical system does not permit itself to be demonstrated with the same compelling strength of conviction as perchance the false solution of a mathematical problem. The adherents of the Brussels program will gradually realize that Europe is not the soil for the Dewey system. But they will be much more inclined constantly as it appears to make the power of tradition and the clumsiness of their antagonists responsible rather than the system itself. Even now it has sustained a new defeat; in the fall of 1896 they united, at the invitation of the Associazione tipografica-libraria italiana of publishers and librarians at Florence, in order to take action upon the demands of the first Brussels conference. With a "non liquet" they adjourned. Now (September, 1897,) the commission created at that time for the study of questions has reported in favor of the system, but has not won the approval of the full session. While the Associazione tipografica-libraria (it convened this time at Milan)

imposed a period of testing for the system and again postponed the ultimate decision,the newly founded Società bibliografica italiana, whose first convening coincided in time and place with the most recent annual conference of the previously mentioned association, declared the Dewey classification in its present form to be unacceptable and entrusted a committee with the formidable task of inventing a new system,(che incontri il favore di tutti con una notazione speciale simbolica).And what do the friends of the Dewey system say to that?The question is not yet decided;the reporter of the Florentine Bolletins thinks therefore it is desireable that the matter be brought in a future convention before men who are less prejudiced and better informed.In any case a noteworthy compliment for the men of the bibliographical society.

As to the extent of the use of the aystem in America Otlet seems to have collected his information from people who have more regard for numbers than for things of more vital importance.Evidence as to that may be presented here,the trust-worthiness of which admits no doubt. As is well known the international catalog conference held in London July 1896 at the invitation of the Royal Society was concerned with question of a system and both leaders of the Brussels movement who attended the conference as Belgian delegates,did what they could in order to bring about a decision in favor of the Dewey system.Their efforts were fruitless as is well known.But strangely unfamiliar and yet deserving of the widest publicity id the exposition of J.S. Billings on the subject.Instructive as is his criticism of the system its summary of the actual conditions can only be repeated here."When I knew"he said,"that I should be sent to this conference I sought to ascertain the extent of the Dewey system in America.I visited Mr.Dewey and had a conversation with him.

I went to Boston and to other cities and this is the result of my investigations. In the United States there is no state library which has adopted the Dewey system; no university library in the United States has adopted it except Albany (-that is the library which is under Mr. Dewey's administration-) and New York (Columbia University) which is the library which earlier was under his direction and in which he introduced it, where now they are planning to replace it with another for its deficiencies are realized. Every large library of any age naturally has endeavored to adhere to its accepted system, so it would seem it would bring with it very great difficulties. According to a report made one year ago by the United States commissioner of education.... there are fewer than one hundred libraries with the Dewey system, only thirty two with the Cutter and a still smaller number employing other systems. An argument which explains the use of the Dewey system (- and promises greater adoption of it in the arrangement of books in the stack-) is the fact that small libraries are being erected every where in the country and that the persons appointed for their administration and cataloguing for the greater part are young women who took their course in Mr, Dewey's library school and have become familiar with his methods; and likewise the fact that the Library Bureau, which owes its organization especially to the energy, technical endowment and skill of Mr. Dewey, supplies cards, books, labels, in short everthing arranged according to the Dewey aystem so that it is possible to establish a library without understanding much about it. That is very convenient and remarkably useful. For my part I am prepared to give the highest recognition and admiration to Mr. Dewey, not only for keenness of vision which he has shown here and in other questions of library administration, but also for the wonderful amount of strength, zeal and perseverence which he displays

in the endeavor to settle this problem of the world and give his ideas the widest possible circulation. I admire men who believe in themselves and their ideas and do their best to transform them into realities. The large libraries in New York do not use the Dewey system; the large Boston library, the largest free public library which we have, does not use it; the Boston Atheneum and the New York mercantile library, our largest subscription libraries, do not use it and moreover have not the slightest intention of doing so. If they started anew, they say they would not use it." That sounds very different from the results of Otlets investigations. One would suppose that the people who are advocating the universal repertorium would have been compelled to regard as one of their first tasks a consideration of its probable sphere of action with the closest use of all existing aids. But neither the first nor the second Brussels conference has deemed it necessary to consider this point in the formulation of their numerous desires and conclusions and the way in which Otlet has brought together a lot of irrelevant data in a report for the answering of these questions shows clearly how little importance he attaches to their significance. If meanwhile the friends of the repertorium, who still have a very practical interest in the elucidation of the problem, acquiesce, then indeed we have no occasion to penetrate deeper. We are satisfied therefore with the reports which Frantz Funck-Bretano, and Charles Richet have contributed; the one in order to prove the hopelessness of the undertaking, the other in order to show its necessity. On the ground of the statistics given in the report of book publishers which on its side goes back again to the Droit Auteur (the official organ of the bureau established by the treaties of the Bernese literature conventions in Bern), Funck-Bretano values the worlds annual production of original writings at

200,000 in number. According to his own view he places too low an estimate on the number of periodicals and society works therein included (10,000) and so it seems he estimates 360,000 articles and in all inround numbers 600,000 cards, which the international office at Brussels will produce annually in order to keep up with current literature. The index of the literature already appearing will require ultimately at least 10,000,000 to 15,000,000, cards. Thus remarks Otlet, since this estimate appears to him to be too low. Of Richets statements, it is here nesessary to repeat but one. According to the exact statements of Marcel Bandenino, the number of the works in medicine published in serials amounts to 40,000 annually.

Based on this report, Ricket estimates the extent of the entire periodical literature for one year at 600,000 articles. In addition to both of these recent estimates, there is also a third which is ten years old. In his plan for a recatalog of Periodica published in 1888, F. Nizet assures us that he has placed too small an estimate if he estimates the number of the articles published monthly in European periodicals, and valuable monographs at forty thousand. This would give annually 480,000 bibliographical references for the periodicals of Europe alone. In the absence of more reliable data, one must proceed from these compilations if one wishes to gain a conception of the vastness of the undertaking. In order to avoid the appearance of extravagance, let the sum total of the titles be that which the bibliography of the past claims, fixed at 10,000,000 and the annual added accumulations at 500,000; contrary to all expectations let it be further accepted that the literary production remains constant. Likewise let it be granted that all the plans of both Brussels conferences be fulfilled over night so that the international office might yearly clip, mount and classify not only 1,000,000 titles as

formerly,but also print and distribute to the subscribers and besides take care of the 500,000 added annually.In ten years the universal reperterium would be ready with its 15,000,000 titles.The library which has subscribed thereto has now a classt and alphabetical set of 30,000,000 cards to keep in order and seventeen hundred cards to add daily to each of its catalogs.

The provision for 30,000,000 cards has cost 240,000 francs, their accomodation entirely apart from the work_ approximately as much and every year 8000 francs more may be estimated for the new additions and as much for the new drawers.This would be a great expense,yet not too much for such colosal possessions.But if we proceed only twenty years further, only twenty short years, the universal reperterium will now number 25,000,000 titles, the library will have 50,000,000 cards to care for and it will be an ever increasing burden for those already in straightened circumstances.Ought not both men to have postponed even in their first ardor a consideration of the consequences of their proposals for the future?And why should and must the world take this Herculean task upon itself?This the answer;concerning the advantage and necessity for a bibliographocal universal reperterium there is common unanimity.This is indeed somewhat bold and might even remain so if the few who have taken an open stand for the ideas of the world catalog,had declared their agreement unanimous.
For in such matters we should not accept silence as consent without further investigation.But from the beginning there have not been wanting those quite able to speak who have expressed with sufficient clearness their doubt as to the feasibility of the whole matter,if indeed the agitation of the last two years had not awakened more frequent opposition.

No one intends to deny that there is still very much to be done in the realm of bibliography and that the innumerable hours of precious time which today must be applied to the laborious and often enough unsuccessful researches of a secondary nature could be spared for greater creative work with proper arrangement and a richer development of bibliographical service.

On the other hand we must decidedly dispute with the advocates of the Brussels program the fact that they are on the right path to the solution of these obstacles to scientific progress- if an overvaluation of bibliography does not lie in the expression.

Otlet says that one of his friends possesses a collection of 3000 bibliographical slips for a single disease of the eye, "Conjunctivitis" and another collected during six months of the year 1895 no fewer than six hundred titles of works on the practical results of serum therapeutics, while Richet maintains that the literature has grown in the first two years of its existence to five hundred and ninety six publications. In truth had the men desired to combat the undertaking with the same degree of zeal that they are moved to prove its need, they could hardly have found more suitable examples than these.

For the only things which they prove for modern bibliography with unresistable eloquence is the indespensableness of the critic, the necessity of weeding out the proportionally few works which have advanced science, from the overwhelming mass of worthless compilations and of seperating in the great mass of compiled treatises the chaff from the wheat. If one desires to collect all the studies and articles on Roetgen's discovery in the completeness striven for by the Brussels Institute, there would be at his command certainly now at least a th ousand entries. Besides the collector himself hardly anyone

would have a keen delight in the rough catalog which,without commentary or criticism places the article of the illustrated family sheet next to the fundamental work and even the most special specialist might well stand aghast at working thro this wilderness.
It is almost out of the question that such considerations themselves should not have been made a matter of concern in Brussels.But then they seem to have disposed of them as easily as was the case with the study of the way and means for carrying out the undertaking. One does not need to be a pedant in the affair to be horrified when one understands how the spokesmen of the movement have expressed themselves on this point.Let us first pave the way,then let us collect hastily two or three million references,wherever we can obtain them most easily,then let us carry away twenty five or thirty percent of mistakes,it may be in the recording of the titles or it may be in their arrangement,into the bargain.
The mistakes and the gaps would be corrected and supplied later and indeed very easily,thanks to the arrangement of the catalog in single cards,as we have already indicated.For these corrections the whole world will cooperate,for in a large number of instances,the repertorium will be made accessible to all who are able to indicate them.Altho it is a fact that great undertakings can not be put into operation without a certain degree of indiscretion,yet not many would be able to reach to this freedom of comprehension.Of all the works which exist for the bibliographer,the construction of a systematic catalog is the most interesting just because it is the most difficult,and everyone who at any time has had the opportunity of working with one knows the struggle with the host of doubts and scruples which the scientific arrangement of titles daily stirs up, not to speak of the snares which insufficient knowledge lays at the

feet of even the thoroughly educated worker. No system in the world will remove these difficulties, not even the Dewey tables. Of what value will be the results, if this most subtle of all bibliographical work, carried on by a host of learned assistants, who have only the titles not the books themselves, according to the remotest possible bibliographical instructions, is taken up like a great piece of wholesale work which is well done if it is quickly done? Where in the world exists the pressing need which could pardon ignorance of the method? We posess a multitude of bibliographies and critical literary articles almost impossible of examination because of their number, which, in large measure, could accomplish much more for their subject than the universal repertorium ever could accomplish. We know the disadvantages and the gaps. We realize what there is still to be done; we have brilliant examples as to how the losses are to be repaired and the gaps filled out, if science is to accomplish a real service. Where then lies the necessity for the universal repertorium? The delegates of the second Brussels conference have recognized offically the necessity of the establishment of a special and critical bibliographies toward the completion of the universal repertorium. This leads to a conciliatory conclusion. Let us remain in our old paths and wish them all success in their new one.

4.James G.Barnwell.

It is difficult to understand the logical consequences of the train of thought which lies at the base of all these boundless plans and which none has expressed more clearly than James G.Barnwell, librarian of the Library company of Philadelphia.

Every catalog of books, so he says, is a blessing, an economy of intellectual and manual labor and of time. The wider and more limitless its scope, the greater its benefit to its users, and if its scope is so broad as to include the whole of the worlds recorded productions, then its advantages are boundless. But on the contrary, the objection must be raised that, according to all foresight, the profit would be far less than the work invalved. It is fairly taken for granted that among a hundred industrious employees of a large scientific library scarcely more than five or six are found to whom opportunity is given-naturally only in mere title entries-of overseeing all that ever has been written in the whole world concerning a stated subject. That there are so many systems for which already the literature thirty years old has only historical interest, that even in remaining branches of knowledge ordinarily a work is soon superseded by others might indeed cause objections to be raised against every scheme for a complete catalog with evident justice, but still more against so great an undertaking which considers neither local nor national boundaries. The spirit which urges the creation of the universal catalog or universal bibliography, bears a certain resemblance to that one which formerly pursued its obscure path, fortunately long since abandoned, in preparing editions cum integris variorum notes, in which every consideration fell a sacrifice to the endeavor for completeness. The editions have little hope of revival and not much

greater appears the out look for the realization of the contemplated efforts,which today are active in Brussels.Barnwell's plan-he plans for an alphabetical index of all monographs of the world-lays less claim to our interest because he does not especially commit himself to the description of the plan for the obtaining of necessary material.Very worthy of consideration however seems his proposition to arrange this index chronologically somewhat on the order of Panzers annals.Even tho the work might come to a standstill,it would have furnished something independent,exclusive;a reprint of the whole or seperate parts as an alphabetical or subject arrangement would make necessary from time to time,never would be necessary here.In supplements it could concern itself only with the proportionally few books which in a first collection might have missed the eye of the bibliographer.The first sections of the reperterium would be assigned to the older literature and would probably be disposed of in sufficient quantities to cover the cost.Naturally its use would not be conceivable without an index whose periodical reprint would not be nearly so expensive as that of the whole work.Indeed full titles with all necessary data would be very desirable,but one could limit himself to the attainable and be content with single titles such as the English decennial catalog furnishes.On the hypothesis that all printed books could be indexed with 2,000,000 titles,volumes of the size of this catalog would be sufficient for its accomidation.

It is evident that Barnwells'proposed arrangement would only then be acceptable-and with the outline of a national bibliography one can not afford to do otherwise than consider carefully-if one could leave out of consideration his energetic contraction of a title to every line.Otherwise the index would number but a few less volumes than

repertorium itself and the disadvantage of being compelled always to consult two indexes instead of one, would hardly be overcome by the advantage of the reprint of the smaller edition.

A word in closing. Let the universal catalog and bibliography be or not be a Utopia, this much is true-and this is said only in order to meet the misconception of the present criticism-that the authors of the plans here produced are well aware of the enormous difficulty of their task and with their disinterested zeal for scientific interests -even the misconceived-have a just claim upon grateful recognition. Nevertheless whoever desires to see with what impartiallity one should take in hand such an enormous work let him read the treatise entitled "Buchhandel und Wissenschaft" in the report from the book trade where A.L.Jellinesk of Vienna represents this as one of the most essential advantages of the bibliographical encyclopaedia recommended by him; it should first be clearly recognized how many books may still be unwritten. Hundreds of scholars could still gain rich laurels.

Chapter 2.

The central catalog of the libraries of a country.

As has already been mentioned, a gradual progressive developement of the central catalog plan which owes its life to a chronological arrangement, is not known. The arrangement according to countries therefore is presented.

I America.

Charles Coffin Jewett.

Chronologically and very properly at the beginning of this narrative belongs Charles Coffin Jewett's plan presented to a very small circle as early as 1850, which by no means disclaims its American origin so far as this appears in many striking particulars.

Among all plans for a central catalog this is perhaps the only one whose complete lack of success could arouse the least wonder, especially in consideration of the motto of the influential Smithsonian Institution, whose librarian Professor Jewett was at that time; and bearing in mind the purpose for which it was founded and realizing the enormious sums which are used in that country in the service of scientific undertakings the wonder concering this failure might still increase. This plan differs from all others also in its origin. While almost everywhere the central catalog appears as a direct demand constructed out of scientific, or at the same time practical and scientific needs, we find it here, so to speak, as the final step of a natural stage of developement, as the completing cornice of a gradually constructed building.

This is Jewetts' plan. Every printed catalog of a continually growing library is out of date even before it has come out of the press. Forced by necessity one takes refuge in supplements,

which become intolerable as soon as their number grows, and the user of the library is compelled for the sake of one book to consult ten catalogs instead of one. Nothing remains to be done except to insert the supplements and to reprint the whole, The necessary expenses might be defrayed as long as it is a question of smaller collections, for large collections they are beyond one's means. Should these especially give up therefore the great advantage of printing for making their catalogs accessible? There is a way to become master of these difficulties. The cards could be stereotyped separately, the plates kept in alphabetical order still, so that the new additions can be inserted easily, and the reprinting of the whole catalog can be done at any time. The cost of resetting, the chief expense, disappears, and with it all work for correction and revision.

Entirely apart from the extension of which it may be capable, this plan shows its significant value by its application to a particular library. The extra expense for the stereotyping of the titles might amount to nearly 50% of the cost of material. But even at the first reprint it would be more than returned. The price of both editions by the application of this mode of procedure would place it at 52% less than with new composition. Moreover we would be satisfied with a proportionally small number of copies if a new complete edition could be set up so easily. Paper and printing expenses would be saved also. Finally the arrangement of the titles for the reprint would go from the hands of the librarian into those of the printer. The attention of the first would be limited solely to the new accessions. Concerning its entirety Jewett further says the advantages of this plan are shown by its connection with an organization comprising the entire country. In two libraries of a universal character, with every 1000 and more volumes a fourth of the titles would coincide.

If then one of the two libraries would place at the disposal of the other the stereotyped plate first set up for it, it would save for all with their first common title the expenses of preperation, composition and stereotyping, approximately enough to cover the extra expense for the stereotyping of the titles belonging to it alone. A third institute which joins the organization would find in advance a still greater portion of its titles among those already stereotyped and after the fourth or fifth catalog it would be proven what great sums the acceptance of the plan would save the libraries. The work of a new library stopping to find out the common titles would be facilitated by the fact that catalogs already printed according to this plan were embraced in the central catalog of the subscribing institute.

The printing and stereotyping of the titles which are to be prepared according to fixed rules binding upon all assistants of the organization issue from a central place without regard to their future disposal. The catch words, if they are names, are stereotyped in a particular line; so the name need not be repeated with every title and on the other hand more titles can be inserted between name and title, if necessary. In the order in which they are stereotyped, the single titles receive running numbers. These refer to the local index of the central catalog where, following the numbers, are indicated all libraries in which the books are to be found.

At the same time however these numbers will show the extension and progress of the whole work. Finally the Smithsonian institution, fully recognizing the inestimable advantages which are to be expected from the final aim, the central catalog, offers to introduce the work and undertake the direction of the entire organization according to the following plans;

1. The Smithsonian institution publishes the catalog rules.
2. Other institutions which intend to publish their catalogs are urged to enter into agreement with the rules in anticipation of the stereotyping under the direction of the Smithsonian institution.
3. The Smithsonian institution bears the extra expense of stereotyping either in whole or in part as agreed.
4. The stereotyped titles remain in possession of the Smithsonian institution.
5. Every library which enters into this plan has the right to use at its option all these titles in the office of the Smithsonian institution for the printing of its own catalog. It pays for only the collection of the pages, printingand distribution of the titles.
6. The Smithsonian institution will publish as soon as possible a general list of all cooperating libraries which it has added during a stated interval.

So much for Jewett's plan which displays an unmistakable trend of good fellowship. I regret not to be able to dwell longer on particular points; how convincingly he fights for the alphabetical arrangement of the central catalog; how clearly he demonstrates the advantages of his proposition for the establishment of a national bibliography which every five years could be reprinted with desirable completeness. But enough has been said to make intelligible the surprise expressed in the preface why this plan placed so enticingly before the world, has not experienced a single serious trial of its worth, and that in a land which is not lacking in the necessary preliminary condition, i.e. a large number of richly endowed libraries.

In an article by Charles A.Cutter the view is expressed that Jewett's plan-often mentioned since in terms of regret and longing-failed because of the lack of a sufficiently strong national organization Moreover the number of libraries has been too small,their power too limited,the desire for good catalogs not strong enough.This may be. But meanwhile the situation of things has changed fundamentally, Today there is no country in which the ground for cooperative work is more excellently prepared in a quiet manner in the realm of library administration than America.Also there is no lack of men who with a complete understanding of the boundless range of this plan keep its memory alive and perceive the best means for carrying it out,in order at last to make an end of the complaint heard incessantly concerning the everlasting repetition of one and the same work. In spite of all,this fruitful field still lies uncultivated. However if now a new outlook presents itself for carrying out the purpose of Jewett's plan,as to all appearances is the case,certain libraries are not to be thanked but a wonderful technical discovery. When in the year I858 the Boston public library moved into its new building Jewett was chosen as its superintendant and remained in this position until his death in the beginning on the year I868.And now again in the spring of I895 the library, having increased meanwhile to over 600,000 volumes, has moved into new quarters,and at the same time it begins,the very institution to which Jewett devoted ten years of his life,the realization of his plan.But the form and extent of the plan are changed and Jewett's name is not even mentioned. As we have seen,the considerable increase in expense with the stereotype plays a considerable role in its plan.

Today it is far cheaper to carry even a single line written by hand in the form of a stereotyped,faultless copy than simply to set it up according to the methods used formerly.The combined setting up and printing machine,the linotype,which makes this wonder possible is the discovery of Merganthaler,a watch maker from German Switzerland,living in America.It has been in operation only ten years but however is already in a fair way, at least in America, to displace hand type setting everywhere newspaper or similar printing is concerned.The touch of a key on a board permits the matrix of the desired letter to slide into a collecting furrow which takes the place of the justifier in the hand of the typesetter.Matrix ranks next to matrix;also here as with a typewriter a bell signal calls attention to the approaching end of the line.What is still more important,the seperation of lines,their casting in stereotype metal, the distribution of matrices, all this the machine itself does with mechanical exactness,without compelling the typesetter even for a moment to interrupt his work.The costly provision for casting writing will be made superflous by the machine;the distributing is no more the time-robbing labor and source of fearful mistakes;the employee can increase his work to at least six times that of the old hand composition and the lines can be stored at will,or after their use be cast again into the crucible.The great significance of this discovery was recognized from the beginning for the periodical issue of a growing catalog and there was an endeavor to make a practical use of it at an early date.Still it is reserved for the board of directors of the Boston public library to turn it into account in its complete scope and on a large scale.

Promising economy and greater advantages at the same time, the board decided upon the purchase of a single machine and the installation of the necessary compositor in order to have the work begin simultaneously with the inauguration of the administration in the new building, whose final aim is the catalog of the library printed in a stately row of volumes. The activity of the machine would be of value next in the new accessions. After the printing of the catalog cards the types should not be melted but be stored in alphabetical arrangement, so that every one or two years without further expense the publishing of a complete list of accessions can be made.

At the same time however, the work of the linotype will be extended on the old volumes gradually working backwards until after a number of years the day will be reached when the last title is stereotyped and the printing of the complete catalog of the entire library can begin.

Jewett has not lived to see this discovery, but this is what has led to the translations of his dream into a reality, if only within modest bounds.

Whether on that account it should be connected with his name or not is unimportant.

Still his interest has had its own value in the matter.

2.Italy-Enrico Narducci.

Enrico Narducci,the librarian of the Alexandrian in Rome, who died in 1873,displayed the greatest tenacity in the defense of his idea. He is morover the only one who again and again in assiduous work ought to place beyond the possibility of a doubt the practicability of his plan and the advantages of its undertaking by means of experiments conducted in a large scale along the prescribed plan. No fewer than three attempts at different periods of his life are specified in his case,each one displaying increasing enthusiasm and energy,but each one also,-and this is a significant feature-directed toward a different goal.In the year 1867,he demanded the establishment of a central catalog of printed books of all the public libraries in Italy.(-there are about three hundred-)or at least that portion of their collection which was composed of Italian authors or of works,which had reference to the father land. The impossibility of the work without the cooperation of the government authorities was greatly emphasized;this cooperation however was not directly involved in consideration of the unfavorable political situation as subsequently when the propositions were submitted to the minister of public instruction.

At the beginning of the year 1876 all thirty two government Italian libraries had common rules for the preperation of indexes. Starting from these "Regolamento organico delle Bibliotheche governative"Narducci now recommended the alphabetical central catalog of the manuscripts as well as printed material of these 32 collections.All that they owned of Boccaccio's manuscripts and editions he exhibits in a sixteen column index in support of his undertaking. Again a number of years pass by without effecting the fulfillment

of his desire or even facilitating its introduction,but also without shaking his confidence.He had been informed that his instance of Boccaccio proved nothing,that the compilation of a single article does not mean much;that an entire alphabet would be somewhat different.The absurdity of this objection,which wholly overlooks the fact that the catalog itself is composed of single articles,has been most clearly demonstrated since he has succeeded in collecting the first actual part of his catalog.But this limitation to thirty two collections is now given up;his literary life work is henceforth the alphabetical central catalog of the printed books in all Italian libraries and in October ,I88I,the request was issued to no fewer than 408 library boards of directors to send in to him on cards of a stated size,a list of all their books whose titles would be arranged under a-ab.The desired material for the task came in from I27 of the administrations to whom he had applied,was revised,and in I883 an extensive piece of work was handed over to the ministry with all kinds of indexes and recently recommended catalog fixtures.Here as always we are especially interested in the organization of the work which had found a somewhat exhaustive presentation only in the plan of I876.The minister of public instructions orders each library to present a sample card;they are exactly alike except that each one bears on the upper right corner another symbol namely that of the library concerned;

I.for the Bologna university library,2.for the Cagliara and so forth up to 32 for the Marciani in Venice.Each librarian has to provide himself with a number of cards corresponding to the works of this library which in all respects resemble the received card,and the work can begin.The number of the title cards sent in to the minister every month by the individual libraries must not be the same.

Or the small collections would be ready very soon, while the largest and most valuable would be delayed and thus could not keep pace with the simultaneous combination of the different catalogs at a central place. Each library will therefore send in monthly as many cards as are necessary for the indexing of one per cent of its possessions, so that everwhere after I00 months the work as far as the libraries are concerned, will be finished. At the central office-for this, one industrious, active and experienced bibliographer is sufficient-it will be the business to carry forward the work to its completion. At the close Narducci, also in this respect without predecessors or followers, enters into a detailed account of the cost, which he introduces with these charming not very translatable words "Quite different is the condition of affairs here; it is a question not alone of a meritorious work, but also of a profitable business."
The catalog of the manuscripts will demand 3 quarto volumes for every I00 sheets and that of the printed books can scarcely exceed 7 volumes of like size. The work of printing can be distributed through ten years so that annually only the expense for the preperation of one such volume in 3000 copies will be levied (ie, 24800 £)
Certainly the I34I institutes which the year book of the minister of instruction shows, at the instigation of their superior officers will hasten to possess this work at the modest price of 30 £ per volume; the remaining I659 copies will be disposed of probably to the many libraries and private persons whose requests will come in from all parts of Europe. This gives a total receipt of 9000 £ for each volume which represents an outlay of 24,800 pounds. This estimate of the expense is reported only because of the argumentative value of figures, and he thus rids himself of the suspicions of the over-weight of his imagination in the plan.

In order however to prove on what thin ice the critic moves, I note the view of Guiseppe Ottino, a specialist and connoisseur of Italian libraries, that in place of 7 volumes, as Narducci estimates not even 70 will be sufficient for the central catalog of printed books which he rejects in toto as altogether useless and impossible; while the venerable experienced Julius Petzholdt will not credit the possibility of the undertaking but still calls the plan "very ingenious and magnificent".

Narducci himself maintains that his proposition of 1876 had been almost put into execution, if only the opinion held by the minister had not been adverse and thus relegated his plan to the realm of dreams. It is a pity that none of these objections has been made public. Perhaps thereby we might have been able to learn more for our purpose than from Ottino and Petzholdt who gave no attention to the practical side of the plan. An anonymous writer in the Centralblatt für Bibliothekswesen says the same and he gives expression to the prevalent idea in regard to Narducci's last work stating his doubt as to the practicability as well as the need of the task and finally warns the librarian of the Alessandria of the rational antipathy of his famous country man, Anthony Panizzi, to the printing of the British museum catalog. No one of the three has found the fundamental mistake of the plan; the strange lack in the organization of the work. As to the accomplishment of the entire work to the very end of the printing, the chief burden will fall upon the individual libraries since it would mean for them, not the mere transcribing of already prepared copies of cards but an entirely new undertaking. Let us hold fast to this belief and let us hunt out from one of the last two catalog attempts of Narducci a title behind which the

signatures of twenty or more libraries stand and construct for ourselves an origin for it;we see twenty people in as many different places bending their painstaking industry to the same work;we see the 20 cards going to the main office and we see here finally the officials, after laborious confirmation of their identity, assign the symbol for the nineteen cards to the twentieth and send this one alone to the printer.This is assuredly a convincing example of the waste of energy,which would result from Narducci's organization. This lack might be understood if his enthusiasm had not exceeded the theorizing;but that the practice had not opened his eyes--the available way for overcoming these difficulties might have been self evident-is and will remain incomprehensible.

France-J.B.Hebert.

For his last plan of 1883 Narducci has prefaced as a motto the saying of Benjamin Constant:,"Le triomphe des idées utiles n'est jamais qu'une question de date." It is perhaps no mere accident that we read the same words on the title page of a book,which long before it,was to carry into wider circles the plan of the centra catalog; it is this essay of J.B.Hebert's on the formation of a"catalogue général des livres et mamuscripts existant en France."

What the former Doyen des Notaires of Rouen desires and attempts to make clear in a very comprehensive exposition,so far surpasses indeed our aim that there remains only the general fundamental plan as a common point of contact.A short exposition of his plan seems nevertheless necessary.

The Bibliothèque Nationale is the main office which has to collect its own supplies from the supplemental supplies of other libraries For every individual work which the library possesses-different editions of the same book are kept together-a bulletin is printed, also a large sheet,and sent to all state and city libraries in France.These mark their own possessions by the addition of their signature,give a careful description of the books which they have found in their catalogs over and above those in the Nationale,and send the bulletins back again.The management in Paris knows now all examples existing in France and copies of the works under consideration and concerns itself with the entering of the titles,i.e., its individualization by a combination of numbers which makes impossible any confusion of it with any other in the world.The catalog whose establishment is demanded should present many claims. It should not only guarantee the speedy discovery of the desired book,if the seeker knows the author's name or the subject treated;

but also to him who knows nothing more than a portion of the title it must prove itself an infallible guide to impart prompt information concerning proper names appearing in the title as well as the life and works of the author. For eight or ten times every title will be repeated on differently registered cards, which then form the basis for the separate portions of the catalog to be printed later. This system of entry which has also a practical and scientific side, i.e., shows an immovable place for the book not only mechanically according to the words of the title, but also scientifically according to the contents thro significant numbers, is considered as a whole so intricate that its production-already remote in itself to our interest-would delay us unduly. It is sufficient still from the closing chapter to state that on the basis of acceptance, France possesses 4,000,000 prints and manuscripts, the number of the necessary catalog volumes is estimated at I000 volumes of 400 pages each, the cost 20,000,000 francs and the time for the work 20 years.
In the introduction of his book (p.I4) the author asks permission to be allowed to wish himself success in his plan,
Did he himself believe in its realization?

Austria-Karl Zelbr.

The most recent proposal for the centralization of all the collected libraries of a country thro the construction of a cooperative catalog comes from the Austrian librarian Zelbr at Brünn. His plan is above all here considered the most conservative; he emphasizes the standpoint of utility alone and proceeds thus limited to the necessity even to its most extreme limit; but this too has been passed over without debate for the order of the day. Zelbr recommends an "alphabetical general catalog of the books of all public libraries in Austria printed since 1800"; the literature of the earlier centuries he says, has only historical value now; their really epoch making books are made accessible long since by reprints and collections. Certainly this catalog itself would suffice for nine tenths of the practical need. But one may indeed suppose that the reasons asserted by him have influenced the author to this close limitation less than the idea by whose means the prospects of his plan could be improved. Therefore one should remonstrate with him concerning it as little as concerning the advantage of his energetic abridgment.

Thoroughly inexplicable it seems why he proceeds with the establishment of the manuscript catalog not from the collection of one of the two large libraries of Vienna but from a book catalog-he suggests Heinsius or Kayser-which he has copied on cards by the aid of ten reliable and intelligent assistants who have made themselves familiar with his system of abridgment. Of course in this way it is certain that the workmen will proceed more easily and quickly than if they must seek out the copied title from the possessions of the library, not only the literature of the nineteenth century,

But what will this small advantage be in comparison with the far greater one which the publication of the index of the most extensive collections offers, that at the same time with the copy the note of location will be obtained, which will save the largest library such time wasting comparison? Somewhat different will be the case if the devised catalog should be limited to German books since 1800 and if on the other hand there should be a trade catalog which would represent even this literature completely. Then the outcome from this source would have the great merit of providing all the material under consideration for the general catalog; then there would be only the titles copied from the bibliography to compare with the catalogs of the separate libraries, to note the existance of the books in question, finally to remove the superfluous cards, and the manuscript would be ready. But neither one of the two conditions is under consideration. Zelbr estimates the German volumes not catalogued in the trade catalogs and the foreign literature at approximately 30% of the number of books of all the libraries. Supplements are then necessary and these will be furnished only by comparing all the catalogs of the individual libraries-a chronological arrangement is not to be found in any-with the index copied on cards from the trade catalog. But if indeed the bibliography would offer as a fact as many advantages as it has in reality disadvantages, then by means of the recognized method of cutting and clipping-2 examples may be had with ease-for one tenth the money and in a much shorter time a more trustworthy material would be acquired than by means of copyists. Finally there would still be time enough for the changing and abridgment during the arrangement of the cards and the printing.

To the most essential portion of the work i.e.the comparison and noting of collections, Zelbr does not devote in my opinion the desireable attention. The cards arranged alphabetically would be perforated on the edge and set in a case in the order of the books and sent to the several libraries and to the largest, the university library at Vienna, first. Each of the libraries notes by a mark on the lines on the lower edge whether it possesses the work in question or not. For the index of the books, which are not contained in the card catalog those copyists will again be employed who have proven themselves the most reliable in this arrangement; these supplements will be inserted in the alphabetical catalog of every library after its completion. That is all; whether the card catalog will be delivered in part or in whole, whether they will compare collections successively or simultaineously, is not stated; just as little an attempt is made to estimate the extent of the work to be accomplished and the time necessary for it.

To all appearances however the author of the memorandums-and this deserves to be emphasized-has the only exact method of comparison to my mind, whose merits tower above all other methods of work previously presented since by means of this, each individual library is put in a position to avail itself of the work of its predecessors to the best advantage for itself.

5. Germany.

(I) Karl Ed. Forstemann and Heinrich Von Treitschke.

With us it is the custom to trace back the movement for the centralization of our library catalogs to the article of Heinrich Von Treitschke's concerning the Imperial library in the Prussian year book and to speak ill of it. A certain justification for this lies in the fact that every article has taken up again the long forgotten question -and indeed without any conscious renewal-and has brought it again to light. But the application of the very old idea is in one land very much older. As early as 1842 we find in three volumes of the Serapeum the demand advocated with great zeal, to make amends for the lack of a Prussian central national library by the establishment of an alphabetical general author catalog.

The important work and one still to be recommended today whose chapters are concerned with our object, bears the title "Einige Praktische Bemerkungen und Wünsche über die offentlichen Bibliotheken in Prussen" it is not signed but the authorship of Karl Ed. Forstemann, librarian at Halle, who died 1847, is safely established. He sypported his demand as did Treitschke by reference to the centralization of the French literary treasures in the Paris national library. Both had in mind the same kind of a plan; and both passed over the difficulty of the work with equal ease. But while Treitschke sees his goal reached if saving our scholars "an incredible mass of useless copying", if first of all the large provincial libraries of Prussia would place duplicates of their catalogs in the Berlin collection-the other large German libraries for their own interest would follow in the footsteps soon and gladly-Forstemann, as a practical librarian, naturally takes a step in advance and asks for the assigning of all these "duplicates" sent in "forthwith" to a commission

formed of competent men whose duty it would be to make at once from all this an "alphabetical general author catalog of all the public libraries of the state". He shows further by a couple examples how this catalog may be arranged, how much the titles must be reduced and so forth. Even its continuation he has at heart; to make this possible all cooperating administrations are to send in yearly an alphabetical index of their new accessions. We see that Treitschke's scheme was not in itself surprisingly new. His undisputed merit is, above all by the power of his personality, to have incited a new fruitful opening of the subject which since then has been kept in mind by many heads and finally has led to the plan by which we have proceeded. The weakness of the practical side of his proposition is so evident that silence on the part of the profession, however strongly they might be impressed with the excellence, would be very strange. In fact the opposition was not long delayed and to two almost simultaneous specimens of it we are indebted for two plans, in arrangement and method resembling each other scarcely more than the one which they attacked in common.

(2) Karl Dziatzko.

Dziatzko begins by testing the practicability of Treitschke's proposition and arrives, in spite of all sympathy for the thing itself at the only possible conclussion "that the amount of work bestowed upon the mechanical copying would be enormous, the cost excessive, the advantages very doubtful, standing in no proportion to the extent of the work." But however that may be, that the commendable idea, Dziatzko further adds, may be realized in other ways, led to a truly national undertaking, namely the establishment of a "Printed classt catalog of all the public libraries of Germany" After the title of every book would follow the signature of the library which possesses it, a simple mark would be sufficient for the books which may be found in all the collections or selected groups. Thus the scholars not only in Berlin alone, to which Treitschke's wish was limited, but in other parts of the world could ascertain easily and definitely what was to be found in German libraries.

A number of inestimable advantages however would accrue to the administrations themselves in this manner, entirely apart from the saving of space connected with the employment of printed titles. They could, as far as need be, construct an admirable supplementary catalog by means of cutting and clipping copies printed on one side; the written work left would be limited to the addition of the signatures. A simple arrangement of the title slips relating to the individual libraries, and in the same comparatively easy way a new alphabetical catalog could be made. By no means an insignificant gain would it be for office and users also if, under the influence of the same catalog, the subject arrangement of the libraries, in the lapse of time would be made similar.

Finally it might be expected that the expenses of the planned central catalog would be covered by its sale, in whole or in part, all of which in consequence of the subject arrangement would possess a definite, independent value, even tho this were not great. The author is so brief concerning the manner of procedure for the execution of his plan that none of it can be passed over here. "If as is most reasonable, the imperial library at Berlin becomes the center of this work, then it must be according to a fixed plan of cooperation as detailed as possible, for the separate parts must be placed in union with those libraries whose store of books in these subjects, presumably, is especially rich. After a preliminary collection of the titles is obtained and their arrangement completed, they will be printed in rather small quantities and delivered in collected slips to the library administrations concerned. They keep an accurate list of their own possessions, gather supplements and on the basis of all this material, the conclusion of the work and the printing follows little by little. The progress of the library catalog will be secured by the regular printing of supplements on the same basis until the remodelling, (by this time a much simpler affair), and the reprint of various portions of the central catalog will seem necessary and practicable." I will not enter into the difficulties of the undertaking, because the more one enters into details the more is he submerged by them. If# really successful in coming to an agreement on a system, at the present time it would still be almost impossible to inspire with the same spirit of joyful, sacrificial energy 35 libraries, which are placed under so many independent jurisdictions without finally, sooner or later, coming to a stand still. The method of work I may also leave untouched and at once come to the vital point.

It seems to me that the attainment of the aim in the way here sketched is impossible. In my opinion he has overlooked the fact that the necessary hypothesis of a successful agreement is the identical arrangement of the material to be compared. There is more than one library having no systematic catalog and among them scarcely two which have accepted and employed the same system in all details. To take only one example. In the Berlin imperial library the arrangement of the modern German literature is arranged according to a close subject classification; in the Berlin university library according to chronology; in Halle according to the alphabet. It is not evident how these three libraries even could carry on the comparison of their collections to a creative issue without losing whole years in the process. The Königsberg library which has systematically indexed its riches in old theological literature as little as it has the greater part of its more general collection could scarcely do otherwise than regretfully return the slips in question as they come in. If one still maintains at the present day that no library exists without an alphabetical catalog, then of necessity one must be led to this conclusion; for the establishment of the central subject catalog the central alphabetical catalog is the indespensible preparation. But the proposed organization of the work is also unacceptable. Whoever follows step by step such a division of a catalog till the end of printing will scarcely be able to shut his eyes to this fact. When the 30 slips are returned, each one accompanied by a smaller or larger number of added cards then it rests with the main office finally to enter on the thirtieth slip from th other 29 the results of comparison noted in the different libraries together with the individual titles.

Then the supplementary cards are to be arranged, in connection with which it will turn out that by far the majority of the new titles are entered in two or more duplicates, for every library has reported its surplus independently. The notes of the works in ones possession must still be compiled with the aid of a model-the superseded copies of the titles, whose production has cost time and money go into the paper basket before the printing press can again go into operation. Then the setting of many days standing will be brought out; no title is complete, because it lacks the sign of the library. Moreover none can remain in place, for new reinforcements are inserted. Now for a second time, galley proof, corrected sheet and printing and the section is ready. It is clear that one would dare resolve upon the acceptance of this organization, which has such small consideration for economy of time and money, only if it furnishes any method especially of reducing labor and expense or if it excelled the other methods of work in reaching the goal more speedily, Neither is the case. The preparation of superfluous copies of the titles, which is a time robbing work, might be avoided if they would send, not 30 slips to the different libraries, but a single one on a circuit thro all institutions so that it would come back as a prepared portion of the entire catalog. The progress of the work would not be delayed in any way thereby as might appear at first glance for its speed depends entirely upon how much material for the main catalog comes into the main office daily. The extent of this would be the same in one place as in another, for one naturally, without waiting for the return of the first portion, day after day would send a new one, so that the continuity of the work would remain secure in single institutions.

The only difference would be that here the first division of the main catalog and also the whole work would be concluded a couple of weeks later, to which no one would attach great importance. However this change of organization still would bring no simplification of printing. For the insertion of notes of possession and all new titles, there would be the very expressive need of having hundreds of pages set up. Still there is a way to become master of the situation completely. It would be the proper thing, if it were a question solely of the realization of Treitschke's plan.

However it is at the same time the only one left, with the ever widening scope of the task, -since they place on the one side, the central catalog multiplied in a limited number of examples, and on the other hand, the printed catalog, to be consulted everywhere with equal ease. Not slips, but manuscrpit title cards may be made the basis of comparison and the printing would not be promised before the manuscrpt, at least of that portion under consideration, of the whole catalog could be completely issued.

(3)Karl Kochendörffer.

The second man to take up Treitschke's plan and to seek to show another more advantageous way to the goal,was Kochendörffer,at the time assistant in the public library at Cassel.Its solution was very probably suggested to him by the neighboring model of the Murhard city library,whose director Uhlworm,about a year before had been the first in Germany to introduce printed cards.Kochendörffer (1884) thinks that all German libraries are applying themselves zealously to the revisions of the catalog.If we could now make up our minds to give up once for all the old custom of writing with all its inconvenience,and take up the innovation,much more advantageous for the individual institute,of printing the catalog cards,then there would be at once the collective catalog of all books existing in Germany whose natural center would be the imperial library at Berlin. Every library would have sent in to Berlin a stated number of these printed cards with their signatures.It would be the chief task of the commission appointed for this purpose to care for the uniformity of the entry as well as the wording of the title and the combination of the whole consignment into a single alphabet would follow.In the future he thinks every scholar will turn to the central office in order to have his wishes filfilled without trouble.If Kochendörffer would instruct each library to send to the main office title cards in manuscript and to share with the latter the task of superintending the printing and of placing at the disposal of each individual administration the printed cards in the necessary number,then this method,contrary to the one really recommended with very small collections,shows that every book exists in Germany on an average of only twice,a reduction by half of the enormous cost of printing levied by all the libraries together,not to mention the saving of

work. The objection raised against Narducci's plan of work is still valid against this plan also. It is sufficient to refer to it. Thus far theoretical plans. For comprehensive conclusions as to what is to be learned from them in regard to the negative as well as the positive sides for the Prussian cooperative catalog, a better place will be found later.

Appendix.

Information in regard to further plans.

For the use and advantage of those who feel a deeper interest in the theory of the central catalog here follows with brief reference to their sources, a symposium of all other plans as far as they have been presented unsought in the course of the work. Here as formerly will be left out of consideration, those plans, whose aim is the record of a literature limited as far as contents are concerned to time or place.

I.

The universal catalog and universal bibliography.

(I)Martin Schrettinger,in his attempt at a complete text book in library science which appeared 1808-29 has given expression to the idea of the world catalog in many places in confused and contradictory terms.In the three parts published in 1810,he wishes for the time when"a company of experienced and active librarians might unite for the construction of a common reperterium of all literature".In the closing numbers however which appeared in 1829,he advocates the establishment of an alphabetical subject catalog of all existing literature,by that he understands " an index of contents.We will only state the circumstance that if the subject catalog of the Munich royal and central library is carried into effect and the possession of the whole library appears in print,then all the other libraries will have nothing more to do than bring out supplements in order to make the execution of the enormous idea possible.Thus the extension of the undertaking is already conceived by the treatment of all journals and collections of editions and finally of manuscripts.

(2) 1845.Louis Félix Danzou,musician and librarian,arguing from the advantages of the universal acceptance of one scientific system, pled for a central catalog of French libraries; a priori a universal bibliography would shortly be established,containing in subject arrangement all writings since the discovery of the art of book printing.In order to have the central catalog of all collections of France or of Europe itself,it is still only necessary to tell where every work is to be found.

(Danjou)-Exposé succinct d'un nouveau systeme d'organisation des bibliothèques publiques.Par un bibliothécaire,-Montpellier I845.According to Quérard,La litterature française contemporaine 3:I37 and Quérard,Supercheries déveilées 1/2 526 p. At the conclusions the following criticism:On voit par les idées émises dans cet opuscule,que son autenr est étranger aux travaux de catalogue.

(3) I850.Charles Dilke at the close of his notice of the report of the commissioners appointed to inquire into the constitution and government of the British Museum in the Athenæum, II May,I850,page 50I makes the following proposal:
A catalog is necessary which shows us, not only what we possess, but also all that we lack and at the same time tells where the books we seek in vain are to be found. Panizzi was compelled to conclude the printing of his catalog as quickly as possible (the first and last volumes appeared in I84I),but a number of assistants could collect from other catalogs and bibliographies,all books printed in British territory,which the British Museum did not possess. Cooley's plan, to stereotype the titles separately, would make the establishment of such a complete index possible within a few years.This would be England's contribution to the universal catalog which must be accomplished in this manner; the most important governments of the world accomplishing the same for their countries in the same manner.Worthy of note also is the advice to secure a greater permanence for this catalog by limiting it,according to the varying needs of students and readers,to the literature up to I838.

(volume I of Panizzi's catalog, published in 1841 reaches thus far), but besides to take an inventory of all newer publications. Compare Frank Campbell, The theory of national and international Bobliography (London 1896) page 171 ff 1856.

(4) 1856. Andrea Crestadoro, without committing himself as to details, desires the universal catalog of all printed materials of the world. "There can be but little doubt that the whole civilized world would rejoice to assist in the noble undertaking."
The index of the contents of one library, he agrees at the close with the author of the above mentioned series of articles in the Atheneum, might have passed at that time when " Menschen, durch den schmalen Bach getrennt, Einander hassten" - and yet might be unworthy of an age and a people which have extended the hand of fellowship to the whole world in the exposition of 1851.

(Crestadoro).-The art of making catalogs of libraries; or a method to obtain in a short time a most perfect, complete and satisfactory printed catalogue of the British Museum Library, by a Reader therein -London 1856 (p.59 f--)

(5) 1874. See Bonnanges' plan in this treatise in chapter II, 3.

(6) Sir Henry Cole, who already in 1852, has submitted Dilke's plan to the Society of Arts, steps forth in 1875 with his own plan. The principal European states are to unite for the cataloguing of the works printed within their boundaries according to similar rules. Every nation is to publish, in stated portions of time, a certain number of these titles printed always on one side on the same material and in the same form. Different shades of paper may be used in different lands; red in England, green in France, brown in Italy, blue in Germany and so forth. The publication would proceed

chronologically;the first periods would bring the literature up to I550,but then the portions of time would become smaller all the time and finally be limited to single years. The different lands would exchange their titles and now everwhere one is in a position to establish catalogs of every description and scope by means of cuttings and clippings.

Axon,The projected Universal Catalog (Library Journal I878.3:I76.) The privately printed sheet in which Sir Henry Cole made known his plan,is not in the British Museum.The title according to Axon runs thus (Sir Henry Cole).-Specimen sheets of a proposed catalogue to contain the title of every book which has been printed from the invention of printing.These titles will form the basis of a general catalogue of the printed books of all nations,being indispensible to every great library,both public and private as showing their contents and deficiencies-London,printed by Spottswoode & Co.I875.

(7)-I875.Ernest C.Thomas recommends the universal repertorium. Nothing more definite can be made known,for the little monograph which was to have made his plan known to a limited circle (Notes of a proposal to make a Universal Index to Literature London.Pardon & Son Print.I875) is nowhere to be found in the British Museum. Petzholdt in his Neuer Anzeiger I876.p.369 compare also Garnett, The library I893.5:93.

(8) I876.Charles G.Hottinger submitted to his friends a provisional plan for an "Index of all printed works."The undertaking was intended to interest members from various cultivated nations and the members of the professional circle interested therein (librarians, publishers,scholars and promoters of scientific enterprises) and to be completed by their cooperation in work as well as in

expense. Existing bibliographies whose titles could be placed on separate cards and be alphabetically arranged either by copies or by means of cuttings and clippings form the point of departure. When this purely mechanical work is disposed of, then the editorial management necessary for the attainment of uniformity would follow immediately at the central place by means of bibliography offices founded. The authorized work of correspondence could be carried on at the same time in different public and private libraries whose task it would be, to notify the central office of such works as are omitted or entered incorrectly in the bibliographies. From all possible sources, if need be by direct questions, inaccuracies will be corrected; names supplied; biographical data, date and place of birth and date of death be added and so forth. Finally in the case of every title it will be specified by a large and small Roman capital, to what field of knowledge and to which if its subdivision the work in question belongs, in order to prepare the systematic index of all printed works which shall be issued after the completion of the alphabetical index. The establishment and printing of the alphabetical index in 7000 copies -the number of the works to be considered is estimated at 3,000,000-will demand ten years and cost I,845,000 M.

The signed monograph from which the preceding information was obtained numbers only 8 pages, but enters into all particulars and even includes the formation of a fund as capital for life long pensions for the assistants in the work.

Hettinger.-Ein Vergeichniss Aller-Druckwerke. Vorschlag. Strasburg. i.e. 7 October I876. Compare Peltzheldt in his Neuer Anzeiger I876. p.369-7I.

(9) 1877.B.Cadwallader preaches library cooperation in all things. To do this successfully a central bureau must be established as head quarters.The library of Congress is the best for this purpose.Its chief task should be the universal catalog.According to a system accepted by all cooperating libraries a classification number would be assigned to every book and this work published in official communications.Appeal to a special tribunal would be provided for cases of doubt.Every library would refer to this board for additional classification, those of their books which are not found in the bulletin of headquarters.
When the books are so classified, the printing of the universal catalog could begin,which could best keep the form of a dictionary catalog with authors,titles and subjects in one alphabet. According to this conclusion,every library could mark its possession by a suitable sign and thus have their own catalog with the universal catalog.Annual supplements could be issued, until a reprint would be deemed advisable and so on.
(Cadwallader),A national Library System,with a universal catalogue (Library Journal 1876-77.I:369-71)

(10) 1878.William F.A.Axon in opposition to E.F.Taylor,the author of the article on bibliography in the Encyclopaedia Britannica."The idea is now wholly chimerical,since the number of books surpasse all human calculations",appealing to the intelligent specialist, H.G.Bohn,who regards the completion of the universal bibliography within a few years as possible,demanded the international cooperation for the establishment of an index of all books printed before 1600.This would prove so useful that its further extension into the present work would be justified.

Axon. The projected Universal Catalogue (Library Journal 1873-3; 175-77.)

(II). 1878. Benedetto Salvatore Mondino recommended a Universal card catalog with the printed volumes of all public libraries proceeding like Garnett from the printed catalog of the British Museum (at that time just planned). The necessary complements would be a cooperative catalog of all manuscripts.

Mondino.-Brève relazione del primo Congresso internazionale dei Bibliotecari tenuto in Londra in Ottobre 1877.-Palermo 1878 (p.: 25-29).

2.

The central catalogs of the libraries of individual countries.

I.-England.

1854. Lord Seymour presented to the House of Commons the desirability of all public libraries in the country uniting in the establishment of a cooperative catalog.

Crestadoro.-The art of making catalogues of libraries. London. 1856. (p.59)

2. Italy.

(a). 1872. Twice in the course of the year 1872 Emanuele Rocco advocated a subject catalog of all manuscripts and printed works in the public libraries of Italy.

Rocco-Alcuni progretti letterarii. Discorso letto ed approvato il 1 febbraio 1872 nella sezione delle Lettere dall' associazione nazionale Italiana di scienziati letterati ed artisti, Napoli [?] 1872, p.2-3.

Rocco, Dei cataloghi alfabetici delle biblioteche (Il. Galilei, quaderno VII, maggio 1872). Nach Narduci Dell' uso e della utilità di un catalogo delle biblioteche d' Italia Roma 1883 p.VI.

(b)-1881. Domenico Gnoli, director of the Vittorio Emanuele library at Rome recommended the establishment of a central catalog of all the printed volumes in Italian libraries.

Gnoli, Un sogno (Il Fanfulla 1881 No.29) According to Narducci, Dell' uso etc. p VII.

3-France.

a.1791.The oldest plan for a central catalog on a large scale is that of the French government in 1791.The overthrow of the Communantés religieuses had brought into the possession of the state an enormous unknown quantity of books.It was desirable to found therewith large public libraries for the welfare of the people.But in order to arrange the treasures it was necessary first of all to make their acquaintance.Three members of both committees which had formed the constituent assembly for the administration of church properties, (Comité ecclésiastique and Comité d'aliénation des biens nationaux) met together 16 of October 1790 to avoid the issue of contradictory measures.Their first business consisted in applying to a number of scholars for support in their labors.This was the origin of the volunteer commission which sat in the Palais des Quatre Nations and received its name from this place.It was divided into sections and Mercier de Saint-Léger, Ameilhon, De Bure and Dom Poirier, very prominent experts were especially asked to prepare the solution of bibliographic problems.The 24th., of March, 16th., of May, and the 8th., of July, 1791, the Comités-réunis in cooperation with the Comité des Quatre Nations issued detailed instructions to all district magistrates to index according to stated rules the manuscripts and books in their possession and send their indexes to Paris.But this was to make possible not only the accurate selection and distribution of books, but also to serve for the formation of a general catalog of all French libraries, which could tell the resident as well as foreign scholars where he could find a book or manuscript belonging to this state. The Comités-réunis broke up at the same time, 30th., of September 1791, as the constituent assembly without having seen any results of their efforts worth mentioning.

The legislative assembly took up the work of the constituent assembly but by decree of 2-4 January 1792, commanded the work of cataloguing to proceed without delay and placed all expenses incurred thereby for the accomplishment of the work upon the state treasury. But this was just as powerless to break the indifference and passive opposition of local authorities as the national assembly, which anew inculcated the instructions for 1790-91 through the Commission temporarie des arts, 27th., of January 1794. The largest plan presented, for whose advancement the state pledged its influence and means of assistance, fell a sacrifice to the restlessness of the time.

Labiche, J.B. Notice sur les dépôts littéraires et la révolution bibliographique de la fin du dernier siècle.-Paris 1880 .p.5-14.)

b. 1839. In artcle 37 of the Ordonnance organique des bibliothèques publiques, published the 22 Feb. 1839, all libraries which received their acquisitions from the ministerial book subscription or shared in the advantages of the copy tax law were asked to send in their catalogs to the minister of instruction in order to make possible the compilation of the Grand livre des bibliothèques de la France, which should be placed at the disposal of all bibliographers, authors and scholars. The carrying out of this idea seems to have amounted to nothing in particular.

Labiche J.B. Notice sur les dépôts littéraires etc p.14.

c. 1845 See Danjou's plan for the year 1845 (I. R.) d. 1874. Ferdinand Bonnange, formerly head of the bureau of argriculture and now Maire of Palaiseau, demonstrated ways and means for the establishment of a catalog of all French libraries. The author of the article "Catalogue" in the Dictionnaire Larousse regards a universal repertorium of all works as unattainable until they have had a law for a few years to

effect. But today the matter is entirely otherwise for through Bonnange's invention, which permits one to make the card catalog accessable to the public without fear as to the destruction of its arrangement, the solution of the problem is not only possible, but an easy matter. Twenty copies in two years at the longest could prepare the 2,000,000 titles of the Bibliothèque Nationale, The rest of the libraries would have much lighter work with the indexing of their far more limited possessions. They would add more than one million titles so that with an expenditure of 320,000 francs, the Catalogue universel national (c'est le seul qu'un Français puisse avoir actuellement l'ambition d'établir) would be established. If every nation would do the same for itself there would no longer be any difficulties in creating the universal catalog. The plan of the Bibliothèque Nationale of having its catalog printed in book form gives Bonnange an opportunity in 1896 again to bring forward his plans. The commission which had recommended the publication, with an expression of regret at being compelled to refuse admission to the collection of the other important Paris libraries, doubtless would have arrived at an entirely different result if it had known his invention. There is only one hindrance lying in the way of the desired extension of the index and that is the desired book form. With the adoption of his "Système de cartes fixes mobiles," the extension of the catalog to all French libraries would be an easy matter. Every title in the Bibliothèque Nationale, to begin with, would be copied on a seperate card, then printed according to the rules of the possession of other collections, and so on. The cost of this catalog which must find a palce in all important cities could be estimated in round numbers at 6,000,000, francs.

Bonnange,-Le bilan de l'esprit humain. Projet d'un catalogue universel des productions intellectuelles. Mémoire sur les moyens à employer pour dresser rapidement des catalogues exacts et complets des richesses renfermées dans les bibliothèques---------Précédé d'une préface de M.E.Littré----- Paris 1874!

Bonnange--- Projet d'un catalogue général, unique et perpétuel des imprimés compris dans les bibliothèques nationales et les bibliothèques municipales. Mémoire explicatif des moyens à employer pour accomplir ce grand oeuvre, l'imprimer et le mettre an jour dès l'ouverture de l'exposition universelle de 1900.-- Corbeil 1896.

Section 2.

Printing in relation to cataloging.

Until after the middle of this century printing was used in cataloguing only in the publication of whole catalog or periodical supplements, whose only aim was to keep the patrons informed as to current additions. It was an important advance when they commenced to prove, in their daily cataloging with the problem of continuing the catalog usually dome by hand, the superiority of typographical process, above all to demonstrate the gain for the eyes and the saving of space. In its entire significance the advantage of this plan was first shown in the very limited amount of space, especially when the final step had been taken and the employment of printing was combined with the centralization of the work. Two points of view will be most influential for the choice here presented; first of all the publication of the cooperative catalog of Prussian book collections is such a vast undertaking that only printed catalogs of the largest catalogs in the world can be approached with profit. On the other hand however with regard to its continuation a more careful consideration of the circumstances in which printing has taken the place of hand writing in the indexing of current accessions seems to be demanded. In opposition to the theoretical discussion of the central catalog plan, the influence of the later performance is here clearly perceptable, on that account the chronological arrangement is chosen, with this limitation still that the works of a single country remain together. But this review would have the discription here given incomplete in some essentials. In recent years outside of the libraries a great number of bibliographical undertakings have arisen, (the extensive aims of the Brussels institute have been mentioned already in the first chapter)

which carry out the plan wholly or as a subordinate plan of lessening the cataloging work for the libraries. Their services must also be noted, more because formerly they have not received from us the attention which is due them as the evidences of a new and very noteworthy turn in the development of bibliography.

Division I.

Printed titles of libraries. I. England.

(I) University library at Cambridge.

(a) Accession.

1861. At the instigation of the present principal assistant Hobson, who for his part could cite similar American examples, Oct. 1861 the University of Cambridge began the experiment, so rich in results, of printing the titles of their accessions and of keeping these catalogs up to date by aid of these printed titles. To it belongs the honor of having paved the way in Europe for this significant step in advance. The course which the cataloging work takes in Cambridge today is, even in minor details, the same as Henry Bradshaw, who in 1857 undertook the administration of the library, established with remarkable organizing talent. For more intimate knowledge of his entire work reference should be had to his unusually and scholarly exposition.

(Henry Bradshaw, some account of the Organization of the Cambridge University Library, Transactions and Proceedings of the 4th., and 5th., annual meeting of the S.A.U.K. London 1884 p.220 ff) again printed in his collected papers (Ed, by Francis Jenkinson) Cambridge 1889. p.385. Here only the setting up of the printed titles can be discussed. Every Monday morning the new accessions as far as they are to be taken up in the printed titles, entirely ready for business, i.e. bound, signed and labeled come into the revising room. Here they are placed in four different series; according to whether they are volumes secured by the English copy tax, books in foreign libraries acquired by purchase, gifts and acquisitions of earlier printed books and finally bequests which must remain intact.

Each series must be arranged according to number and in every book there is a hand written title card placed, with the necessary references if such there are. The four series of cards now undergo final revision (a special attendant being assigned to each one); each one for itself is provided in accessioning with a consecutive number belonging to the corresponding series revised during the previous week. Every year a new set of numbers begins with each series. While the signature (room press and vol. no.) is assigned to a place in the upper left hand corner over the catch word the temporary number together with the number indicative of the accession number noted by the last two ciphers is placed in the right hand corner.
Here the different forms of punctuation serve to separate the work of separate revisions and the separate series. A period between the year number and a running number (95.I) signifies first series, a colan (95;I) the second, a triple peridd (95...I) the third, and a semi colan (95;I) the fourth. Now the titles are ready for printing. As often as 60 titles of a series are together-that is the average-they are printed on both inner sides of an open sheet, each page in 3 columns. The correction and revision is assigned to the office to whose series the sheets belong. Again on Monday morning the books which have come from the press in the course of the preceding week are sent to the bookbinder who cuts out the titles and mounts them in the alphabetical catalog. But these books indexed in these sheets which still remain in the revising room are brought to a special table, where they are exhibited until Friday noon. Thus far they are cared for in an alphabetical catalog on the spot and the number printed on the upper right hand corner is written on the back of the title page so that from the book itself can be ascertained when

and from whom it has been received and where a duplicate of the title is to be found. Friday noon the books exhibited will be taken to their place in the stack and are ready for delivery.

Of every sheet I2 copies are struck off. One is kept as a standard or as they term it, "file copy" and bound according to the year of publication. Every improvement, every addition which is nade in the printed title cards in the catalog at the same time is made in this bound copy. Whatever is not used in the interests of the cataloguing remains in reserve in case a title in the catalog is damaged or lost. Since I885 after the printing of the sheets, the entry was not "laid down," but made into pages and with it the weekly bulletin established whose subscription price is six shillings per year. It comes out on Friday and indexes the new accessions which have been placed in the library up to date of issue and are to be loaned. An alphabetical register covering the entire year is issued at the close of the year. Volume 2 (I895) contains 4I06 titles.

b. The main catalog.

At Cambridge in I87I, the recataloguing of the old books was begun. They go from press to press so that these slips at the same time give a subject catalog, tho a some what elementary one. The method of the work is apparently the same as with the new accessions. A running number shows here also the progress of the work within a year. Only here in order that the titles of the recatalogued books may be distinguished at first glance from the new accessions the number of the year stands in the second place (I:95) and so on.

A copy of these sheets also is preserved and bound by years, but their titles will not appear in the weekly bulletin.

(2). The university library at Glasgow.

Probably William Purdie Dickson was under the influence of the Cambridge university just described, when in 1866; he made use of his appointment as curator of the university library at Glasgow, first of all to give a completely new form to the cataloguing works of this institution, at the same time introducing printing. In the three decades which have passed since then, no need has arisen to cause changes of any significance whatever to be introduced and the same man who is responsible for the methods, oversees their execution still at the present time. The titles considered with few changes according to Jewett's cataloguing rules, are printed as in Cambridge on the inner side of a folio sheet, which shows, with almost the same form as is just mentioned, not six, but only four columns. In taking up the older possessions the titles are printed in the order of the position of the books in the stack, while order of accession governs the arrangement of the new books. In the former instances, the signatures are printed on the edges of the sheets; in the latter only the accession number, the symbol showing location, is reserved for written supplements. The personal as well as subject words of arrangement are printed along on a special line. At the same time differing from the custom of the Cambridge printed titles there appear-only briefly expressed-the references belonging to the titles. Out of the sixty copies which come from the printing press three are cut up and title after title inserted in the three bound catalogs (alphabetical accessions and subject catalogs); the rest are kept in order so that at any time it is possible for the administration to reinforce overcrowded or greatly worn volumes by newly substituted and special catalogs of all kinds. Yearly 1500-2000 titles on 20-25 sheets are printed.

The cost of printing is from 25-30 pounds, a title costs in the neighborhood of 30 pfennig.

(3) The British Museum at London.

a. The accession. Catalog of the accessions to the British Muesum library.

I85I. In the year I85I a new catalog was placed in the reading room. The titles were not written on the catalog sheets themselves, but on thin tough slips of paper, which had been inserted somewhat loosely in the volume, so that they can be removed if need be, by a paper knife. Abundant room was provided for the insertion of new titles and room for new sheets also. The catalog in spite of this, numbers only I5o volumes. It was continued on the same plan. The arrangement of the removable title slips facilitated the maintenance of the alphabetical arrangement, but gave to the sheet a three fold value without making the continual deposit of new sheets, divisions and rebinding for large folio books essentially less necessary. The number of new accessions increases rapidly. Up to I873 the number of catalog volumes had increased tenfold; the letter B took as much space as the entire catalog in I85I. The public treasury, upon which the heavy expenses of this kind of continuation of the catalog fell, was in favor on ground of economy of the introduction of printing. It considered naturally only the recent accessions. The museum administration however (Garnett as director of the reading room had to plead the facts)-could expect from these regulations nothing else than delay in the growth of the number of volumes and laid stress upon the necessity of reducing the bulk of the catalog by the employment of printing.

It proposed for its part to publish separately at once, especially large subjects of the catalog as Bible, Academies, Shakespeare and so forth and so in that way collect into a convenient book the more clumsy and crowded folios. This time the transactions led to a practical result in 1878. But the question had become urgent and even more than all other considerations the difficulty, making it even more more keenly noticable, of providing room for new catalog volumes in the reading room out weighed all other considerations for printing. Besides the main catalog the index of maps and plans required space for over 300 volumes and of music 450 volumes.

In the autumn of 1878 E.A. Bond became head librarian and at once entered into new negotiations with the treasury; not much more than a year passed, and in January 1880, the press began its work in the service of the British Museum; first of all, of course, for the new accessions. Ever since, the manuscript title of accessions are no longer as formerly multiplied four fold with the help of the carbon process, but are sent by lots to the press. The plan of it is as follows: Four copies printed on one side are cut up and inserted in the catalog where the titles take a mere fraction of the room, which formerly the hand written slips required. In the London list of accessions nothing is on principle separate, in contradistintion to Cambridge and thus it amounts to about 60,000 titles a year (that is the estimate from the beginning of the 80's).

The practice observed by the administration in printing was changed in January 1889. While since this time the titles of completely new accessions go to press without separation every two weeks regularly from which they are returned after 14 more days, - the Russian alone are retained for special sheets - they were divided formerly into four

groups according as they belonged to accessions from modern, i e. the English (A) or foreign (B) literature which has appeared in the past five years (in I882 A & B were united into one group) or to the older English (C) or foreign (D) books; according to which, the foreign spoken literature printed in England would be assigned to the third division. When a group of titles had increased to such an extent that it yielded a good sized volume of the bulk of an individual part of the main catalog, it was given in alphabetical arrangment to the printer. As in the printed Cambridge accessions, one reads the signature above the catch word on the upper left hand corner while on the right is the section letter with the running number within the respective section. Not less than 224 parts were printed according to the system just described, when they changed to the new system and at the same time reduced the number of the copies as far as the aims of the Museum itself permitted, while by that time the titles of all accessions were made accessable to everyone at an annual subscription price of 3 £.

b. The main catalog.

British Museum catalog of printed books I847. On the 6th., March I847, Panizzi, then keeper of the division of printed books of the British Muesum, asked by the Board of directors his opinion in regard to printing the catalog, made the following reply; It would be possible to prepare by the close of I854 the catalog of all the books which the Museum possessed at that moment, tho the preparation for printing would last until I860.

The catalog would embrace 70 volumes. If the revision should complete 2 volumes per year, the printing of the entire catalog would require 35 years and at its completion in I895, represent the

collection of the library for 1854. On the 1-January 1881, was begun the printing of the catalog, increased meanwhile, to the enormous extent of 3,000,000 titles (scarcely surmised by Panizzi certainly). Unlike his predecessor of 1841, who was unfortunate in the beginning, he limited himself, not to the possessions on hand at the beginning, but included in his progress also the new accessions of which, at the close of the eighth year, there were something like 40,000 per year. The under taking moved forward with constantly increasing speed; 400 parts have appeared thus far, and it is hoped by the close of the century this gigantic task will be completed.

When in 1880 the printing of the titles of all the new accessions was begun, the space in the reading room available for the catalog was exhausted, not another volume could be accomodated.

The introduction of printed titles promised no relief from this intolerable state of affairs and so the head librarian appealed again to the public treasury, recommending the printing of the whole catalog on about the same grounds as formerly that of the list of accessions. He referred to the enormous number of volumes, to their clumsiness, to the considerable cost of constant divisions and rebindings, to the manifest advantage of being able to collect every time a whole set of volumes into one and provide room for future accessions for an unlimited length of time.

Entirely on this basis-(Considerations of a literary nature are out of the question)-The public treasury declared itself unanimous and appropriated, for as long as should seem fit, a stated annual sum for the special conversion of the manuscript catalog into a printed one. This must be adhered to if the result of the publication of the catalog is to be understood. The money for the printing of the entire catalog was not appropriated, but a moderate annual and

revertable sum for the remedy of the evils shown by the administration. Therefore the printing could not begin with A as would have been natural under other circumstances; but the most unwieldy volumes, which were almost beyond handling and would have to be sent to the bindery otherwise, had to be selected for printing, so that the first volume of the printed catolog included the titles of Virgilius. Later when the public treasury was convinced of the value and general need of the undertaking it agreed to a natural sequence of seperate parts.

Little is to be said about the method of work. If three or four folios of the manuscript catalog, to be collected into one printed volume, are chosen, they, first of all, undergo a literary, bibliographical revision, the necessity of which would be evident to every one who considers that the text of the catalog, which now goes to press, owes its existence to the forty years labors of more than forty different officers. Much more difficult than this examination is the revision of the arrangement of separate entries; there is much to be done here and much greater care is necessary, for the supplementary improvements of this kind would require very costly transposition of the composition. But this work also as well as the revision of the printing (the one is usually enough) is governed by a guiding principle, which the leader of the whole work, Richard Garnett, emphasizes again and again in his instructions; speed and regularity are worth more than over scrupulous accuracy.

It is a question, not of a bibliography, but of a catalog. It is a hundred times better to let a couple of mistakes go than to open the door to the arraars, the fatal enemy of all good administration.

Two circumstances occur to support most zealously this demand of the leader.

In the first place,the stated provision,that all of the annual appropriation,which is not used for the stated aim within the fiscal year,must revert to the government treasury and be lost therefore to the Muesum.But it is also true,that the greatest speed is also the greatest economy of time.The greater portion of all titles obtained since the beginning of printing must be printed twice,first for the accessions and then for the main catalog. The more speedily this progresses,the more will the double task be avoided,a point of view which again has prevailed with the public treasury for special increase of the annual appropriation to 3000 pounds.Thus the undertaking has bean carried forward with almost unprecedented speed.The annual execution has risen in round numbers from I5 volumes in the beginning soon to an average of 30;from this height it has again fallen off.Still for the past year the work seems to have been almost doubled.That the reliability has not suffered by the haste and that the catalog is a bibliographical aid of great worth,only a glance confirms.

Garnett emphasizes, with justification, the fact that the whole work was accomplished without an increase in the office force. One can scarcely help citing what a more active display of liberality in the Museum's endowment would accomplish.

With the large quarto size chosen for the printing, the limited compass of the volumes is surprising, not exceeding 300 volumes with an average of 5000 titles. A review of the progress of the catalog is not out of place here. The printed copy is only the nucleus of the volume made for the use of the library which is intended to possess the ability of taking in the titles currently received unceasingly. In the first instance it sufficed to have the copies designated for the administration struck off on one column on strong vellum paper, so that on the other side a column is reserved for the addition of new title strips. Grooves beside, give the possibility of inserting new sheets. Soon it seems to have been evident that the multiplicity of the accessions could not be accomodated in this way. The columns of copy printed on one side were also attached to the noticeably larger side of a sheet of the strongest and most durable vellum paper; the printed strips occupied only a portion of the left side of the sheet. All the right side and a considerable space at the top and bottom were left for additions. So heavy folios took the place of the quartos in the reading room. Still the expansion of the place alloted for the accessions was not sufficient and now the column strips are so inserted that three wide vacant columns follow every printed one. Naturally it is now no longer possible to condense the average 250 columns of the printed part into one volume so that the copies of the catalog made for the use of the Museum consist of more volumes than the public catalog.

Outside of the copies printed on the one side for purposes of administration 247 copies were struck off. Each volume cost at first II0 pounds; later they were successful by means of an agreement, to reduce the cost as much as one sixth, so that the yearly available sum of 3000 pounds provided for the completion of 30 volumes. Each volume contains on an average 5000 titles; the Museum estimates the printing of a title in round numbers at 40 pf. If Garnett's estimate, that the completed catalog would include 3,000,000 titles is not too high, its establishment, apart from office work, will cost about I,400,000 M. What the sale of the catalog brings in on the other hand is hardly worth considering.

The subscription price at first was made on the supposition that I5 volumes would be issued annually at 3 £. I0 s., but later when the increased appropriation permitted the issue of 30 volumes a year, it was not raised, so that Garnett can rightfully claim that the catalog is one of the cheapest books in the work.

But of the 247, only 75 went elsewhere and half of those were gifts. It was determined to offer a second subscription and to give to all new subscribers all parts previously printed gratuitously or at a nominal price. But in the first year unfortunately such a large number of copies were in demand immediately, that the whole supply was exhausted. Also the separate issues of single especially prolific subjects, as Aristotle, Bacon, Byron, Dante, Goethe and so forth, (thanks to the efforts of the administration to repair by means of especially numerous references the need of a systematic catalog, and to present complete bibliographies of respectively independent literature as far as found in the Museum) have not found the anticipated number of purchasers, altho they sell at an extremely low price

at the most for 2-s. Whether the more expensive separate impressions, particularly the valuable indexes of periodical and society publications of the Museum will sell better, has not yet been demonstrated. As already mentioned, the printing recently has progressed so rapidly that according to all appearances, the entire task will be completed even before the close of the century. But only the copies of the catalog kept at hand in the Museum for the use of the public and administration give a complete list of its possessions. Moreover these library copies in the older portions are already so overcrowded and obscured by the fullness of the titles added since 1881 that immediately after the close of the work the new printing should begin if the public treasury is ready to make a new appropriation. This might well be doubted. As early as 1882, Garnett emphasized the necessity of reprinting at certain intervals. A card catalog, whose continuations would not have this difficulty with which to contend, is, for the British Museum in whose reading room 300 -400 people are accustomed to consult the catalog freely and in all cases of doubt go with the volume under their arms to the superintendent, consequently useless, apart from all other great deficiencies which adhere to it.

It seems that here the book form is the only possible one and this cannot be kept up to date in so large an institution without periodical reprinting, and each time the cost of printing becomes greater and increases the work of revision. Does not the thought appear here urgently that the Museum would have done well to stereotype separately the titles of the catalog as well as the accessions according to Jewett's plan, and to keep the plates in order according to Garnett's plan, to give the institution a single printing according to the model of the university of Oxford and

Cambridge. It has been called to notice already that the indexes of charts and music have a special place next the main catalog.
The first has been in print since 1886, "Catalogue of printed maps, plans and charts." Here it has been possible to condense 300 folios of manuscript indexes into 2 convenient printed volumes, which according to the described custom established, for convenience are divided into 14 volumes in the reading room.
The catalog of music, the one longest held in anticipation, has not yet appeared.
There is nothing left but to mention that the Museum keeps in reserve a number of copies printed on one side in order to add, with their assistance after the main catalog has been completed, certain special catalogs arranged by subject. For the more recent literature obtained since 1880 this work is already being carried on by G. K. Fortescue and published in three large volumes at the expense of the administration under title, "A subject index of the modern works added to the British Museum."
They appeared in 1886, 1891 and 1897 and embrace the accessions of every five years (1880-85, 1885-90, 1890-95.)

4. The National art library at London.

The art library of the South Kensington museum, established in 1852, gave a new turn to their cataloging work. The alphabetical catalog in book form has been given up and is gradually being replaced by a card catalog. Since 1-January 1893, weekly accession indexes have been printed, which makes possible not only the continuance of this card catalog, but in addition, the foundation of a large number of systematically arranged separate indexes, which, later, are to be printed in book form and sold at a low price. Especially prominent in this innovation is the fact, that the cataloguing includes also periodical references.

II-Holland.

The university library at Leyden.

As it appears, it is the example of the Leyden university library, not the far older predecessor at Cambridge, to which all so called printed titles of the continent are to be traced. At least it is stated that the Bibliothèque Nationale as well as the city library at Cassel, have derived from there their practice, which became typical for larger and smaller libraries in the employment of printed titles. In Leyden itself the constant employment of printing in the service of the library dates from 1871, already looking back over a full quarter of a century. The article in the Library journal, by the lately deceased director of the library, W. N. Du Rieu, gives a clear and fascinating account of the cataloguing principles used there since that time. Connected with the institution since 1866, he has seen the very beginning of this innovation. Unfortunately he does not make known on what model it was based; neither is it to be surmised from his article that anyone was of the opinion that a discovery had been made. The mode of procedure is the same today as then. When from 130-140 titles are collected, they are arranged in alphabetical order and printed in five columns, each about 11 cm. wide, on one side of a sheet folio size. 50 copies are struck off, enough to equip not only the four card catalogs (an alphabetical and subject one are each for public and offical use) the accession lists and other official indexes, but also to meet the demand of dozens, who purchase the slips for a couple of pfennigs in order to arrange the titles for their private use.

Quite incidentally it is noted, that only the two card catalogs placed at the disposal of the reader take the well known book form, a custom which has spread from Leyden throughout the world.

The card indexes reserved for official use, on the other hand, were kept in a drawer without mechanical safeguard as to their sequence.

Surprisingly low is the cost of this method.

Including everything -articles with two revisions, printing and paper, the 50 impressions, 25 on light, 25 on heavy paper, cost eleven guldens.

That would be 18m.70 Pf. in our money, so that with an average of 135 titles to the sheet, the office estimates the titles at 14 Pf.

III France.

I. Bibliothèque Nationale at Paris.

a, The accession.

At the close of the year 1874, the administrative force of the Nationale began to issue manuscript monthly indexes of their new accessions of foreign literature for the benefit of their readers. This practice met with such great success, that at the beginning of the year 1877, printing had to take the place of written copies. Since then the "Bulletin mensuel des publications étrangères reçus par le Département des imprimés de la Bibliothèque Nationale," has appeared uninterruptedly. Volume 19, 1895, numbers 4223 titles.

The foreign university publications were still excluded from the this list. For their registration a separate publication was soon provided. The "Catalogue des dissertations et écrits académiques provenant des échanges avec les universités étrangères et reçus par la Bibliothèque Nationale," whose first number, embracing the accessions, appeared in 1884.

(The volume for 1895, published 1896 cites 2731 titles.)

The advantages of the bulletin for foreign works were so evident for the purposes of administration that at the beginning of the year 1882 it was decided to employ printing also for the accessions of French literature. Toward the end of January appeared the first number of the "Bulletin mensuel des récentes publications françaises avec un appendice contenant l'indication des cartes géographiques et des Livres anciens nouvellement entrés au Département des imprimés." (Volume 14, 1895 numbers 9190 titles)

This inventory of national book accessions also left the university publications unprovided for. They were to be cared for in another way.

Neither of the accessions lists registered the accessions of periodical literature unless it was a question of newly establish-ed undertakings. Only in the case of the foreign bulletin is this want supplied by a single publication; this is the publication issued in new form in 1896, the "Liste des Périodiques étrangères reçus par le Département des imprimés de la Bibliothèque Nationale). (It numbers 4324 titles.)

Both bulletins have strict alphabetical arrangement. Registers for the separate parts are thus superfluous; but unfortunately they are incomplete at the close of the years output. For this reason the usual consecutive numbering of the titles has been discontinued. The signatures are however printed simultaneously as in Cambridge and London (it is not done in Florence and Berlin.) Frequently the accessions for two months are combined in a double copy. At least 20 copies of every bulletin, printed on one side, as soon as they come from the press, are cut up for the practical needs of the administration, mounted on card board and assigned to the various working departments of the library.

Two card catologs are kept for the exclusive use of the public; of course only of the recent literature as far as it is indexed in the former issues of both bulletins. The one is alphabetical, the other alphabetical-classt, according to the system of the American dictionary catalogue. The cards are held together like the Leyden catalog, by a moveable binding. Because of the manner of pub-lishing these accession lists, it follows that, under certain circum-stances, if for example, the issues of two months are combined in one number, a book can well be in the library a quarter of a year before its cards are put in the catalog.

The utilization of these indexes on the part of the remaining French libraries for the maintenance of their catalogs is therefore as good as debarred and does not take place in reality, which appears the more deplorable as the French belletin, provided that the copy-tax law is strictly executed, indexes the whole literary productions of France.

b. The main Catalog.

The British Museum was concerned, as formerly stated, solely in the conversion of the manuscript catalog into a printed one. Therefore only one question was to be answered, whether printing was to be employed or not. Everthing else followed as a natural consequence. Conditions in Parisian libaries are entirely otherwise. Here there is no especially centralized catalog pf printed collections. The composition of the inventory out of very numerous and very different kinds of collections, every one of which leads a very different existance; from manuscript and manifolded printed books and card catalogs of older and more recent date, from alphabetical and classed indexes of all kinds, is so complicated that it is difficult to form a clear conception of its condition from a distance. Thus the commission appointed in 1893 of famous scholars and professional men, whose report, signed by Georges Picot on the 24 of December 1893, forms the basis of this brief sketch, according to the examination of the condition of the cataloging work had not only to recommend or advise against the printing of a general catalog, but at the same time, as was to be expected in case their decision was in favor of printing, were obliged to take their stand for a number of leading questions as to the arrangement of the new catalog. They have magnificiently fulfilled this obligation. The commission recommended the printing of an alphabetical catalog

of all printed works of the national library in 3 distinct portions, the first indexes the work whose authors are known, the second, the anonymous works and collections, while the last is composed of a group of special catalogs. In the recommendation of the printing, not only the interests of the library and the whole field of knowledge are emphasized, but its advantages for the safety of state property are made of equal importance, which is somewhat surprising in our profession. Whenever the library has been in the position of claiming as its own, a book which has strayed from its possession, the demand for the return might be based on the entry of this particular book in the catalog, as sufficient proof of ownership. In a much greater degree than the manuscript catalog of the library, would the printed catalog scattered broadcast, yield an excellent means for the secure establishment or the return of public possessions. The catalog is to embrace everything that the national library possesses in printed works, even to placards, election bulletins, published catalogs and pieces of music. Neither the group of a less valuable literature nor the select libraries of the coin cabinets, the collections of engravings nor the collection of manuscript must be excluded, even so small a collection as the one in Fontainebleau, bequeathed to the Nationale in 1888. It is to include also the missing books with references to time and place. The report of the commission shows in all its portions a model clearness. Almost irresistibly it has successfully proven that for the publication of the catalog of a really large collection, the alphabetical arrangement is the only satisfactory one.

Indeed the commission had in its immediate vicinity an emphatic warning against the subject arrangement offered by the example of the unfortunate subject catalog of the Tübinger library; 1855-79, there appeared II volumes, of the subject catalog of French history, and 1857-81, 3 quarto volumes of the catalog of medicine; their preparation has claimed the greater part of the library force and injured greatly the internal administration, so that it became necessary to stop in the midst of the work. The report however does not rest satisfied with a reference to these experiences. So great an undertaking (this is about the gist of their statement) needs a basis as safe and fixed as possible. But there is everywhere a lack of a commonly acknowledged, scientific system, and if there were one, fixed even to the smallest particular, the tediousness and difficulty of the work, uncertainty and delay, error and caprice would not be done away by it. Besides science is somewhat active, a tree which continually shoots out new branches and blossoms, so that the most complete arrangement in the beginning of the work runs the risk of being out of date before its completion. The difficulty of bibliographical work is universally known. The scholar himself who has dedicated the work of his life to a limited field, will often be in doubt, as to which place he will assign a given book or where to find it. Apart from the fact that a bibliography is a purely personal, scientific work, which does not belong to the task of the librarian, as long as it neglects all treatises and references to collections or the supplemental portion of greater works, it is a very insufficient bibliography. The catalog however (this is its first task) is to furnish the possibility of finding the desired book as quickly as possible.

The alphabetical arrangement has a three fold advantage over the subject;it is simple,reliable and up-to-date.Here there is neither a weakness with the pffices to which the revision is assigned,nor does the public need direction.As was already mentioned,the commission recommended the division of the catalog into three completely separated groups,to be treated according to different principles.Over the establishment of common points of view it is at variance,since there have been submitted to its examination a number of different kinds of publications whose relations to the individual portions of the catalog have been assigned in order to make a fixed basis for the division.Here only one will be taken as an example.The thesis of the doctorates are assigned as separate books of the first division,with the exception of the medical, whose considerable extent-the Nationale possesses 85,000 of them-makes the registration in a special catalog of the third division seem strange.The Thèses de license,on the otherhand as well as the foreign dissertations,keep their place in the second portion under the catch word,"Faculté de droit" and "Universités étrangères" The theoretical works concerning music and important medical works are entered in the author index,while the 200,000 volumes of vocal and piano pieces are to form a special catalog of the third group with the three fold register of composers,poets and artists . The same plan is followed in the book catalogs as far as they have not the value of personal works and belong in the first division.Besides the oriental literature,still another class of writings will be assigned by the commission to the third group; they are the so called "Factums" especially valuable for the history of the administration of justice,of which four volumes already have been published.

If the position of indexing in the National, noted in the beginning, is realized, then we must understand that this division will lighten materially the production of the catalog. In Paris, however, the view is held that, as opposed to the centralized catalog, it offers advantages also in respect to its use. The combination of the groups embracing indeed 2,000,000 different titles is one alphabet would not advance the work of research, but on the other hand, impede and delay. This idea, where one is accustomed to a unifold index, can scarcely be shared and in both Berlin libaries where the alphabetical catalogs are divided into an author and anomyous portion, even this separation will be found especially inconvenient by the public; with us therefore, suggestions of the Parisian commission might hardly find much comprehension.

Still the consideration that they proceed from an intimate knowledge of the institute, the needs of the public, and the custom of the officials, keeps our judgment in reserve.

In the revision of the titles, the commission recommends the maintaining of the golden mean between copious descriptions and energetic curtailing, quite according to the model of both bulletins, whose composition is represented also as typical. The official, charged with the leadership of the undertaking, will collect about him first of all about a dozen of the most experienced and reliable workers of the library; this staff, if the work progresses regularly, will be strengthened according to the existing means. No sooner is the first signature submitted to the printer than the material of the volume in question is considered as completed; just as in the case of the British Museum catalog, every volume will state the position of the collection at a different time.

But while there, as formerly shown, the examples entered for official purposes are kept up to date by the insertion of added titles, the Parisian library has made the discovery by an earlier printing of the catalog or of separate parts, that the maintainance of the arrangement in this fashion is possible at best only for a short time. According to this, the commission considers neither the continuation of the printed bound catalog, nor the edition of supplements, nor indeed the necessity of a reprint. It is rather of the conviction that the only form which deserves special consideration for the indexing of such a large and rapidly growing collection is the card catalog. Some examples of the printed catalog will furnish the material for the establishment, not only of the alphabetical, but also of all possible subject card indexes, but the bulletins, as formerly, will continue to supply the place of new supplements. Taking the proportions of the London catalog as a basis, the report of the commission estimates the scope of the indexes desired at about eighty large quarto volumes each one of which would include 32,000 articles in 800 pages. The commission thought the preparatory work could begin in April 1894. In 1895 two sections from the letter A were printed by way of experiment and made accessible to a large circle by their appearance in the "Bulletin des publications récentes françaises." They were the articles Petrus de Abano (In the February-March volume p. 142-44) and Aristotle (Supplement to May-June number 50 pages in extent) The large quarto recommended by the commission was given up in favor of the octavo size of the two bulletins so that the specimens, not only as to contents, but in form, give an idea of the future catalog. How greatly the commission is prejudiced in favor of its plans for division and arrangement the near future will tell.

The article Aristotle in 1896 had a noteworthy supplement, which collected on 37 pages, beside some additions from the Bibliothèque Nationale, the Aristotle editions and translations from seven other Paris libraries. As has been noted already in the introduction, it has only been the unprepared condition of the catalogs of other Paris collections which has led the commission to refrain from recommending the addition of these possessions to the contemplated catalog of the national library. This limitation is easily understood but greatly must it be deplored, realizing from this supplement that the Paris collections contain 1023 Aristotle works and translations, of which the Bibliothèque Natianale possesses only 741, less than three fourths.

Addendum.

The work was given up when the first printed volume of the first portion (author) of the Catalogue général des lives inprimés de la Bibliothèque Nationale appeared. In 565 pages and in 11,067 articles the authors from Aachs to Albyville were entered, and three more volumes of the same size were necessary in order to complete the letter A.-only of this first group, notice-. The first signature bore the date September 1896, the last, April, 1897. Exceeding the plans of the commission the administration has made it a rule to add to the catalog the books coming into the possession of the library during the printing, in case their titles can still be placed in the revised proofs, whose portions have not yet been formed into pages. In a preface 82 pages long De Lisle, with admirable clearness peculiar to himself, gives the particulars of the history of the collection, its arrangement and indexing and a splendid argument for the preperation of the new catalog.

As is to be expected, it adheres closely to the plan of the commission, which can be traced substantially to DeLisle. Only in the important externals of the setting up, have they departed from the plans of the commission, which represented the composition of the bulletin as typical and which the first proofs also show, in my opinion, not to the advantage of the new catalog. In the first chapter DeLisle treats the question raised by the commission concerning the extension of the catalog by the additions of the other Paris collections. The special significance and fruitfulness of the idea, whose origin he has traced back to 1791, has been proven by several examples taken at random, all of which have led to a result similar to that of the supplement mentioned above for the published article Aristotle. What can not be attained immediately he hopes to attain later. If the other Paris libraries had only finished their indexing they could mark their books by the addition of their signature in a copy of the new catalog of the Bibliothèque Nationale and index their surplus on cards, whereby the catalog would have gained that of these collections and at the same time material for a supplement to that of the National library. Aside from the uses, which the execution of this plan must bring to science, it would give the administration an inestimable, and, at present, greatly needed direction for their acquisition of older literature. But finally it would pave the way for the development of the lending system, for if one could only be certain a book is represented in two or more Paris collections, there would no longer be any hindrance in entrusting it occassionally to this or that province library. "Everything so unites," so DeLisle concludes, in justifying the printing of our general catalog. Let us hope that the government will appropriate for us the necessary means for the speedy completion of an undertaking which will bring great honor to the administration of our republic."

(2) The University libraries.

a. The Catalogue des thèses et écrits académiques.

With express reference to the far reaching advantages of the lists, published by the National library, of their accessions obtained from foreign university publications, the minister of public instruction recommends, by decree of 25 June 1885, the rectors of the academies to send in to him annually for publication by August 20 at the latest, a list of Scripta academica appearing during the course of the preceding academic year. In its further application the order states that the titles from the university libraries be put on cards of a given form to be compared with the lists of the secretary and to be arranged in fixed order, so that in Paris the printing can begin immediately after their arrival and be completed before the fifteenth of November. The publishers, Hachette and Co. undertook the publication, and since 1885 (the academic year 1884-85 marks the beginning) the Catalogue des thèses et écrits académiques appears regularly at the prescribed time. Every five years these are collected into one volume with a common author and subject index.

(Volume II, 1894-95, numbers 1296 titles.)

b. The Liste des nouvelles acquisitions.

Since 1886 the French university libaries have been under legal obligations to supply one another with their books, the time of loan of which can be extended to three months. All cooperating circles realize the benefit of this rule; all are agreed on this point, that in order to obtain the greatest possible good from the new arrangement, one must be able to distinguish the possessions of the libraries in question from all the rest. Starting from this requirement Albert Fécamp, the director of the university library and professor of German in Montpelier, applies in 1891 with a plan

embracing all details to his interested colleagues. Surely the time would come, he said, when every university would possess a printed or manifolded index of their entire possessions, when indeed that desideratum would be disposed of. Indeed only in part; for even the realization of this dream for the future would still not obviate the disadvantage that one must always be compelled to wait for supplements for, once for all, it is the fate of every catalog to forfeit, in the very beginning of the printing, the merit of completeness. Instead of folding our hands in slothful waiting we should join in a common undertaking which would promise not only temporary and incomplete assistance but also would be suited to the promotion of the complete satisfaction of existing needs in the near future; namely for the annual publication of a cooperative index of all accessions of the French university libraries. This, outwardly following closely the example of the official Catalogue des thèses et écrits académiques, would appear annually in November and would bring into one alphabet all books added during the past academic year by the sixteen university libraries, indeed so that in every case, one might find, not only the name of the Institute possessing a book, but also the shelf number assigned to it there. The work accruing therefrom to each library would have to be borne by them. Provided the official would write a second card at the time each book is secured and put it aside, at the close of the year he would have his contribution ready for forwarding to the main office, where the arrangement, the withdrawal of the cards duplicated two or three times, with the necessary note as to the location of the book would follow. At all events the probable labor and expense would be far less than the profits to be expected. For so far as the real aim is concerned-the greater profit

to be gained for the government possessions-the new arrangement would prove useful and pave the way for a very delightful advance in the cataloguing of separate institutions,since the copies of the common list of accessions,printed on one side of thin paper, would take the place,at the close of the year,of the manuscript cards with their abbreviated entries;would be filed in the catalog during the intervals of printing only for temporary use and be replaced by printed cards whose beauty and legibility can never be attained by manuscript cards.

Fécamps is,as he himself shows,not the first one who has stepped forth with such a plan.But contrary to his predecessors he had the good luck of fulfilling the realization of his idea with his own hands,which deserves to be the more noticed,since the provision upon which he has made the successful development of the undertaking dependant,-namely the establishment of a central office with state authority and state assistance,-as yet is not fulfilled. Only after he had demonstrated to doubting colleagues the utility of the proposed innovation by repeated publication of accession lists of Montpelier,could he introduce by a comparatively modest beginning,the execution of his plan;Université de France. Bibliothèques Universitaires de Bordeaux,Caen,Dijon,Montanban,Montpellier,et Toulouse.-Liste alphabetique des nouvelles acquisitions. I Année scolaire I893-94.

At the end of the second year Aix and Marseilles,submitted their material also;with the third year Besançon,Cleremont and Lille were added,and today Fécamps has a well grounded hope that soon he will draw the last institution into the circle of its publication,a result which can be sure of unreserved recognition and of active sympathy everwhere.

4.Italy.

Article sixty two of the Regolamento per le biblioteche pubbliche governative of 20 October,1885 brought a real innovation;to the scholar,the possibility should be given from official quarters of informing himself exactly and quickly in regard to the additions to the public libraries of recent literature.For this reason,both central libraries in Florence and Rome were directed to publish at stated intervals,combined accession lists of the state collections The division of the work was to be such that Florence would undertake the accessions from Italian literature,and Rome those from foreign literature.Both publications are to commence simultaneously with the year 1886.

The "Biblioteca Nazionale Centrale" at Florence.

Since 1867 the central library at Florence, which even at that time (as later also the Vittore Emanuele at Rome,founded in 1875) contained approximately everthing which had been printed in the kingdom, furnished to the Associazione typografico-libraria,in accordance with the orders of the Minister of public instruction,the material for the composition of their official organ,the Bibliografia Italiana.The Regolamento of 1885 gave it therefore essentially only one new duty,to publish this material itself in the future.For the list of their copy tax accessions must naturally also furnish the index for the recent Italian literature acquired by the government libraries.There is lacking therefore only the reference to the academies which outside of the central libraries,had the books in question in their possession,in order to make these lists cooperative accession indexes.

The Nazionale Centrale at Florence used and uses consequently, in order to be honest in their task, the cooperation of the other Italian libraries merely for the compilation of their possessions. Consequently not much can be said of the common participation of all government libraries in this task. Indeed the rule stated that the libraries should not only return the bulletin sent to them from Florence with a statement of the number they possess, but also add title cards for the new Italian publications which they own, but which are not indexed in the bulletin. Still this would only serve the purpose of calling the attention of the central library at Florence to accessions by copy tax which had escaped them. But yet it would be a sort of cooperation, if this, moreover, had lasted in general; today when about 200 Regie Procure i Tribunali e Corti d'appello, scattered over the country, might have been at work gathering up three copies of all Italian publications to send them to Florence, Rome and the appropriate district library, the "Bollettino delle pubblicazioni italiane ricevute per diritto di stampa". is the work of the central library alone. For the arrangement of the manuscript, printed formulae are available, which assign their definite place to the catch word, to the subject part of the title, to place and year as well as to all other bibliographical data. The bulletin comes out semi-monthly and arranges the publications according to the directions of the Regolamento in alphabetical classt arrangement. The separate titles are prefaced by a temporary number to which an author index at the close of each volume refers. The wrappers bring in addition a few communications from the library. The other thirty libraries report to Florence a list of their books indexed in the bulletin. On the basis of these statements, the central library makes at the close of the year's work a "Tavola sinottica,"

a synoptical table,in which numbers corresponding to the title numbers in the Bulletin appear,accompanied by the signature of the libaries in which the book is to be found.Practical formulae serve also for the"Tavola sinottica";each number is directed to one card, on which all the signatures of cooperating libraries are already printed.The signature of the institution possessing the book,indicated by the numeral above,has a line drawn thro it and the compositor knows that he is to regard only these.A copious index, on the order of the English title-a-line catalog, embraces the entire years additions.I500 copies of the bulletin are published, 300 of which are sent abroad as gifts to the most famous scientific institutions.The year I895 includes I002I titles.Whatever the practical application of this common accession list for purposes of cataloguing may be,it must unfortunately be stated that only a few copies are made printed on one side-altho any library need only express the desire in order to have it done-and these almost entirely for the use of the National library at Florence,which maintains by this means three card catalogs an alphabetical,subject and topographical. Strangest of all is the fact that the central library at Rome, to which all Italy is a tributary,does not make the indicated use of the bulletin.While recently established periodicals and Italian newspapers are indexed regularly in the bulletin,for those which already existed before its birth,that is before I886,reference is made to the central periodical catalog and further to the Indice dei Giornali politici e d'altri che trattano di cose locali,ricevuti dalla Biblioteca Nazionale Centrale di Firenze,I luglio I885-30 gingno I886-appearing in Rome as Part 6 of the Indici e Cataloghi (736 alphabetically arranged titles with typographical index.).

The first publication mentioned is duplicated in part by the index published in 1891 by the Nazionale Centrale in Florence of the periodicals received by it according to the copy tax law; "Elenco delle Publicazioni Perodiche italiane ricevute dalla Biblioteca nel 1891." (1362 systematically arranged titles with alphabetical index.)

(2) The Biblioteca Nazionale Centrale at Rome.

The Regolamento (article 62) requires all government libraries to send in title cards for their purchases and gifts in foreign literature to the Vittore Emanuele at Rome, which on the basis of this material and its own, publish the supplement to the Bolletino delle pubblicazioni italane", so that, in this manner, a complete annual inventory of all the literary accessions of the state in so far as they belong to literature published before 1886, are to be found. The "Bollettino delle opere moderne straniere acquistate dalle biblioteche pubbliche governative del regno a'Italia" began immediately in 1886 but was discontinued at the close of 1893. The first year's issue appeared in six volumes; later greater spaces of time were covered, as for example, the first number of 1888 covered the accessions from January to June inclusively. In external appearances, especially in the choice of type, this publication differed from the "Bolletino delle publicazioni italiane", not to its detriment. The arrangement and order however, even to the cooperation in the realm of library methods and registers, is the same. Only here the signatures of the library possessing the work in question follow each title. A small "Tavola sinottica" besides, at the close of the year in the manner formerly described, indexes those new accessions from foreign literature, which were registered in former years in the Bolletino. Vol. 6, 1891 had 3265 titles, A pratical application of these accession lists in cataloguing has never been made even in Rome itself.

5 The Scandinavian countries.

(I) The University library at Christiania.

Article II of the Norwegian copy tax law for 20 June, 1882, directs the university library at Christiania every year as early as possible, at all events before the first of August, to publish an index of all books issued in the realm during the course of the year and belonging to it by order of law. (In this list are included music, engraving, lithographs and so forth). This statement is the more acceptable as formerly there was lacking a complete statement of Norwegian literature. But unfortunately the decree postponed the period of delivery for the publications appearing in the course of year until the end of the following January, so that it is not strang if irregularities and carelessness flourish with regard to deposition required by law. To this circumstance is to be attributed the fact that the Norsk Bogfortegnelse, excellently edited according to definite cataloguing rules, has never appeared at the prescribed time. The ordinance to which it owes its existance, came into force I January, 1883; the catalog of Norweigen literature of 1883 should have been compelled to leave the press at the latest by July, 1884, but appeared only in the university year book, published in 1885 for 1884, as Part I of the accession indexes entered for 1883. and as yet the administration has been successful, in no manner, in shortening this great delay to a moderate degree. To the difficulty, complained about again and again, of receiving the books at the right time from the printing establishment pledged to the task, is added lack in the working forces in the library and scarcity of money, so that the issue of the publication was, on the whole, still more delayed while the introduction to the Norsk Bogfortegnelse for 1883 is signed on 26 November, 1884-

here are meant the separate impressions furnished with independent title sheets from the year book-the work on the index for 1891 was delayed until May 1893 and the one for 1892 until September 1894. The next year's issue could be sent out earlier-January 1895-and with favorable out look for a punctual dispatch of business in the future. But this hope had been greatly misplaced. Today, in the latter half of 1897, the index for 1894 has not yet appeared.

Under these circumstances it is evident, and the fact has been confirmed by the statement of the present librarian, A, C, Drolsum, that neither in Christiania nor in one of the other libraries of the realm can we think of an immediate utilization of these printed titles for the purposes of cataloguing. The blame for this miserable state of affairs may be attributed above all to the provisions of the ordinance. A brief space of time for delivery, as almost all modern copy-tax laws order, would best prevent the delay of the prescribed copies. And if tht library were ordered (as is at present practically forbidden) to issue its index at brief intervals, and at the close of the year to collect it by means of a register, ten fold advantages would be obtained with the same work. Gratifying is it that there are no further examples of a library being held responsible for causing an index of all the literary productions of the country without being able to draw from this work advantages for its own cataloguing. As to the regulations of publication, it is to be noted that it arranges in four alphabetical portions the printed works with the inclusion of periodicals, music, engravings, lithographs and finally the newspapers. A classified table of the contents, issued as a special number of the Bogfortegnelse, made the conclusion, the January, 1892 number established by direction of the publisher

by J,B.Halvorson and for 1892 by A.Kjær.With the annual issue for 1893,the publication is omitted in the publications of the library and alas the useful register is unfortunately omitted.

Next to the administration records,the year book of the university library furnishes,beside the Norsk Bogfortegnelse,an alphabetical index of the remaining accessions of the Norwegian division and a systematically arranged list of the accessions from foreign literature,with the exception of the periodicals which,cumulating for a period of five years (compare issues for 1888 and 1893) are noted in the preface.The entire publication,as far as the correctness and brevity of the titles,arrangement and typographical make-up are concerned,is faultless.Only it would be extremely desireable for the administration soon to be in a position to give to its publications a greater activity.So as to prevent the publication of accessions of foreign works from suffering under the obstacles, which a promptly prepared list of the Norsk Bogfortegnelse would make possible,in 1893 as the preface to the issue of 1892 shows, it was decided to issue each part of the year book separately in the future.But while at present the Norsk Bogfortegnelse lies before us,the publication of additions of foreign literature comes only to the first semester of the same year.

The Norsk Bogfortegnelse for 1893 cites 2088,the index of the other accessions in 1892-93,2231 titles.

2. The public libraries of Sweden.

The public libraries of Sweden since 1886 have possessed a general index of their new accessions in foreign literature, which, edited under the authority of the Imperial library at Stockholm by the librarian of the Swedish academy of Science, E.W. Dahlgren, appears annually under the title "Sveriges Offentlige Bibliotek... accessions-Katalog" in an octavo volume of an average of 400 pages and gives the added volumes of the preceeding year under 29 subject divisions. These divisions are subdivided alphabetically. The accompanying society publications and periodicals are taken out of the list of monographs and noted separately at the close of each division. The similar publications of a general and mixed contents form the last two main divisions. The signatures of the library accompanying every title, at present there are 25 libraries interested, indicate where the book in question is to be found. At the close of each volume there is a list of the universities and faculties on whose exchange list the Swedish libraries are. After the names of the universities are placed the number of the documents transmitted by it during the year and the signatures of the libraries, which have received them. The more valuable treatises of this province are mentioned with their titles besides in the proper place. The lack of collected alphabetical indexes might injure the use of separate volumes. The register embracing the first ten years issue 1886-1895 will be the more welcome to Swedish scholars to whose excellent arrangement the sheets already prepared bear witness, the titles alphabetically arranged and very compactly expressed refer to year of issue and division. In the course of the present year, 1897, it will appear in some fifty sheets. The coooperating institutions have the task of dispersing their accessions. in modern foreign

literature according to instructions worked out by the Imperial library at Stockholm, of bringing the titles into the system at the basis of the establishment of the accession catalog, and of sending them in to the Imperial library so arranged every year in the beginning of January, where under Dahlgren's supervision, the final revision and printing will follow.

(Volume 10 for 1895, including periodicals and continuations, numbers 276 titles) A practical utilization of these publications for purposes of cataloguing has not yet been demonstrated, only a few copies printed on one side were struck off, which serve merely for editorial purposes.

3. The theses indexes of Upsala, Copenhagen and Lund.

The desire, expressed in the preface to the first "Catalogue des thèses et écrits académiques, that the countries participating in the exchange of university publications might follow the example of France and Germany and facilitate for the libraries the indexing of their academical writings by means of printed indexes, has found fulfillment thus far to a limited degree, only the university libraries at Upsala, Copenhagen and Lund have begun recently to attach to their shipments indexes printed on both or one side of the sheet; Upsala, I893-94, (I895-96, 37 titles); Copenhagen, I895, (I896) I5 titles, and Lund, I896-97, (23 titles).

VI. Germany.

I. The Murhard city library at Cassel.

In the spring of I882, Uhlworm, on a tour of inspection thro Holland libraries, became acquainted with the printed titles introduced there in the seventies. At home he had been successful in convincing the influential places of the advantages of the procedure, and in the same year he was able to begin to prove it practically by the cataloguing of the collection entrusted to him. The Murhard library has thus the merit of having preceded all German libraries in the acceptance of the great innovation. The titles in classt alphabetical arrangement were printed on one side of a half sheet. I00 copies were struck off, which, in part in the customary way were intended for the establishment of a card catalog kept up according to the Leyden system. Instead of special refereences the main card suffices, on which the necessary words of reference, distinguished in the text of the title by special type, are indicated in writing. The work has advanced so far at the present time that with the

exception of maps and charts there are printed indexes for all the possessions of the library. The experiment set on foot by Uhlworm offers one very especial interest, namely, the use of the existing forms for the setting up of cards directly printed in order to avoid the entire pasting process. After the printing of each sheet the individual titles were spread out and before the breaking up of the fount of type, the hand press came again into service, and fixed and ready for filing in the catalog, there came with each sheet from the printing press 25 cards of all the titles indexed by it. The one hundred proof sheets together with the separate cards, including the paper, cost 22 m. The experiment has thus, since a sheet contains over fifty titles, led to a remarkable result; the direct printing allows not only much more beautiful, convenient and durable cards, but means also, as soon as the issue becomes somewhat greater, a saving in comparison with the usual mode of cutting and clipping. Even tho the administration, in spite of the above fact, carried on the issue of finished cards only one year and then gave it up, the abandonment is the result of purely external considerations, which do not affect the nature of the question.

2. The Imperial library at Berlin.

The publications of the Imperial library at Berlin, the "Jahres-Verzeichniss der an den Deutschen Universitäten erschienenen Schriften" (since I885), the "Jahres-Verzeichniss der an den Deutschen Schulanstalten erschienenen Abhandlungen (since I889) and finally the "Verzeichniss der aus der neu erschienenen Litteratur erworbenen Druckschriften" (since I892) are so widely distributed, that any special notice seems superfluous. Only one thing may be noted here, that in the arrangement of the last publication the so-called printed list of titles

has undergone a very desirable change with the beginning of 1896. The printing office has undertaken the task of setting up the titles every week, whether the material on hand fills the whole sheet or not. Moreover since then the titles have appeared in alphabetical order. By means of both of these improvements the other institutions were enabled to adopt the work of the Imperial library to their own cataloguing, for now they not only can obtain possession of the same more quickly, but also find the desired titles more easily. The expansion (effected October, 1897) of the printed titles into an index of the printed books acquired by the Imperial library and the Prussian university libraries in the realm of recent literature, is to be regarded as an experiment according to a communication accompanying the 37 sheets of the issue for 1897. A supplement of printed titles, which considers only the newly established periodicals, forms the "Verzeichniss der Zeit-und Verein-schriften der Königlichen Bibliothek zu Berlin" issued 1892.
(It numbers 3799 alphabetically arranged titles)

3 The Ducal library at Wolfenbüttel.

The Wolfenbüttel library traces the use of printing back directly to their recataloguing taken up in 1889 at the instigation of Uhlworm. As it appears, neither the English nor the French printed titles were known there. Certainly they arrived independently at the ideas already in use at Cambridge; contrary to the other printing libraries of Germany, not only of assigning to the printing the most important portion in regard to contents and size, of reserving written supplements on the other hand, for the necessities of the library force, but also of rendering these formalities, significant words, signatures and so forth by means of printing and of dispensing entirely with written cooperation. But while in England and France the significant word is simply placed first and then is

followed by the titles, usually with the repetition of the significant word in its place within the text of the title; in Wolfenbüttel they adhere so far to the older customary division of the cards; signature and catch words are placed at the left and right on a running line above the title which, compared with the other method, scarcely signifies a gain in space and expense.

In Cambridge they spare themselves, as we have seen, the greatest portion of the references by printing over the first significant word of the title of the reference, and thus provide for the title strips in two places of the catalog. How long this custom has been practiced there is unknown to me; it can hardly be traced back to the example of Wolfenbüttel, tho it is not refered to in Bradshaw's report which goes very much into details. Certainly in the Wolfenbüttel printing the principle is new of making all special references superfluous by having the significant words of general reference printed together with the main catch word of the title. The latter stand always at the right in the corner above the line, while the others are on the left in the order in which they occur in the titles.

Thus the main cards printed in any number desired, serve at the same time as references, since the significant words, not applicable in any particular instance, are done away with by cutting them out before the mounting. Moreover in order to be able to separate those serving for references and to control the relation of the significant words to each other, the main significant words are emphasized in the text of the title by means of heavy type. It is not to be denied that this arrangement signifies a great saving of work and expense. It is a gain not to be underestimated, that in the application of this method in the catalog one has always, instead of the mere reference, the complete title of the main card which needs never to be looked up.

The objection that in different editions of a book the reference cards must be multiplied inconveniently, is not the case in regulations in force at Wolfenbüttel, where they unite on one card all editions of the same work in their possession. Only one, and in my opinion, not a slight inconvenience, the Wolfenbüttel title brings with it; the catch words do not stand as is to be wished, on each card in one and the same place; in all reference cards they seem moved more or less to the left, at times even close to the signatures on the left margin. The use of catalog cards is facilitated by setting up the first arrangement word always at the same point. This is however because of the Wolfenbüttel practice, of placing the catch words on the right corner and the forename before the family name, never done in the case of the main cards. This evident disadvantage for handling the catalog might have been avoided-at least in great measure,-if, as is customary, they had assigned the catch words to the left corner, had always placed the family name first and moreover had employed the custom, now practiced in the case of aggregated references, of placing the arrangement words over instead of next to one another.

The titles are printed just as in Cambridge on both inner sides of an open folio sheet, each page in two columns. Each sheet bears the name of the cataloguer. fifty copies are struck off, solely for the use of the library. Still the administration of the Zwissler publishing house has granted the use of the forms already set up for editions of separate portions of the catalog. Of these Ausgewählten Bücherverzeichnissen aus der Herzogl. Bibliothek zu Wolfenbüttel, two numbers have already appeared: I. Systematisches Verzeichniss der Lessing-Litteratur, 1889.

2. Alphabetisshes Verzeichinss der Französischen Litteratur(

(exclusive of the nineteenth century).

4 The public library in Cassel.

In 1889 the public library in Cassel began the recataloguing of their entire collection by the employment of printed titles, to all appearances following quite closely the custom of the Murhard library. Each couple of hundred title cards, made according to their own rules, alphabetically arranged, were sent to the press and there printed in the same order of succession. Only in cases of exceptional difficulty is a second revision desirable. Fifty copies of each sheet are gummed on the reverse side, as a rule, ten of these gummed copies are handed over to the book binder, who cuts them up and pastes the title strips to the mounting card. There are no especial references. The main significant word and reference catch words are printed in heavier type. Both are written on cards in the upper corner according to directions of the office, in round hand by a copyist.

The Cologne city library.

Primarily in the interest of their patrons the Cologne city library, under the direction of Keysers, began the issue of monthly accession lists in October, 1890. At the same time regard for its practical application in cataloging was had at the outset, for this reason it was issued printed on one side in heavy paper. After eighteen numbers in three volumes were issued, through want of working force for its continuation, abandonment of the task became necessary. The titles are taken up in systematic alphabetical arrangement. Comprehensive indexes are not furnished with the separate volumes. Added to this it lacked a running number, so that it must have been very hard for the administration to hunt out the

desired titles later. The introduction preceding the first number gives information concerning the details in the selection of the inserted accessions, the wording of the titles and so forth. Only the the one way be mentioned here that the first mention of the author's name as well as the plainer was set aside in order not to interfere with the utilization of the titles for any desired kind of cataloguing.

VII. America.

As was mentioned in its proper place the University library of Cambridge followed the American models when in 1861, as far as is ascertained the first in Europe in the prosecution of its catalog, it introduced printing instead of manuscript form. Entirely apart however from the difficulty of ascertaining reliable dates here, it would be inconsistent with the aim of the present work to go into details concerning the development and present extent of the use of printing in American libraries. Only the recent peculiarity of catalog printing there, which has found in European libraries so far, no copy, should be mentioned here. This, in the establishment of a printed card catalog with the avoidance of the established custom of cutting and pasting, According to Mr. Andrews speech at the last London conference, outside of the John Crerar library of Chicago under his direction, there are at least three libraries which have adopted this significant innovation, namely the Boston Public Library, Harvard College and the New York Public Library. Of the last named institution, which presumably first adopted printed cards at the installment of J.S. Billings as director, here it can only be stated from Mr. Andrew's lecture that a title costs twelve cents.

I.Boston Public library.

The Boston Public Library,which had inaugurated printed cards as early as Justin Winsor's administration, 1868-77, has deserved the thanks of all libraries from its successful attempt to place the linotype, formerly used exclusively for newspapers and simpler pieces of work, at the service of the cataloguing department. A remodelling of the working program proposed at its introduction has brought it to pass that no practical experience has been submitted concerning an especially characteristic side of the machine;i.e.concerning the ease it affords of using a type once set for various issues;still it is doubted,if it can be proven at once that too much has not been hoped for in this respect,as we are convinced even today of the great superiority of the machine over the hand-press in the service of printed titles.On the ground floor of the new building a room 5,20 X I2:I2 m is given up to the printing press.Its equipment consists of two linotypes,about sixty different written sets for the hand work and three presses;the linotypes are also supplied with three extra magazines-the magazines can be enlarged and about a dozen matrices varying in form and weight.The personnel,besides the head, is composed of two type setters (women),a printer and a man of all work.The chief work of the machine is the production of catalog cards,the issue of the monthly bulletin and numberless classt or alphabetical special indices of limited portions of the library and their branches. As exclusively as is possible, three kinds of Roman type are used, which is liberally supplied with accented letters of all sorts and special written characters so that the hand press needs only to be used for Greek,Russian and Hebrew type-this type is inserted for printing the linotype slugs.Still it is proposed to make a complete set of matrices for these alphabets if the linotype is a success.

On the catalog cards the text of the title is given in small pica, the contents in brevier. When the slips with the statement of the desired number of copies of each title are returned from the cataloging department, the titles are divided into six small groups, so that as far as possible these requiring the same number of copies will be together. Each sheet (the material is a rather stiff card board) makes six cards all of which bear the running number of the sheet out of which it has been cut and the date of printing. While these bars, after the completion of the printed editions, are just put back in the crucible contrary to the original working program, the lead lines provided for the publication of the monthly accession lists of the linotypes, after they have fulfilled their first mission are kept for future use. They are better suited to the needs of the contemplated voluminous catalog, because the titles of the monthly bulletin are printed exclusively by brevier and are far scantier bibliographical notes than those of the card catalog. For the reception of these slugs 800 wooden galleys are provided, which are so placed that they occupy a base of 0.69 X 3.55 m. They can hold about twelve tons and are already half filled. The printing of the first years accession list is in course of preparation. The advantages expected from the linotypes have not failed. Statistics have given not less than one hundred and fifty titles as an eight hour days work for a male type setter or much more than enough for a female typesetter. A substantial cheapening of printing is the result in contrast to the old process, for the solid lines allow so much more freedom and speed with the breaking up and sorting than the font set with movable type. The dreaded "pies" are impossible. This ease in handling the fixed lines together with the

practical arrangement of the case constructed for this purpose has reduced the cost of the mere printing from four cents to something less than one cent for the title cards, which for two years the printed cards of the Boston Public Library had required with movable type. Further it is self-evident that the employment of the machine brings with it an economy of space. A complete set of matrices has a place in a flat drawer the size of an ordinary letter case, and in order to accomplish the same work with movable type as with a machine five times as large, a room is necessary for stands and letter case as the linotype requires. The expenditures for cases is entirely avoided, that for types reduced to a sixth, for the price of type metal, which retains its original value; even after it has been in the crucible a thousand times, amounts to only a sixth of the founded type, which is used up comparatively soon and finally still has only its value as metal. The matrix, scarcely noticably worn out by use, costs however two and one half cents; since for each character, 5-20 matrices are quite sufficient the furnishing of a new font is not an important expense. Further the constantly new lines give such a sharp clear inpression as only brand new type can give. The exhausting of single letters from which even large and well-stored printing presses suffer at times, is unknown in the use of the linotype, for the matrix after the casting of each line is returned at once from its new use to the magazine; troublesome turned letters in the final revision do not occur here.
Finally not the least good point of the machine is, that it cares for the distribution with unfailing accuracy and thereby prevents the copious source of printers' mistakes. On the other hand deficincies offset to some extent the many favorable points.

Indistinct manuscripts delay the work of the machine type setter in a much higher degree than that of the hand typesetter. The revision of a mistake demands the new composition of the entire line, which again brings with it the possibility of new errors and demands especially in the last revision unusual care. Since the key board contains only large and small letters, numerals, punctuation marks and the ordinary characters and accents, all matrices for the cursive, for small capital letters etc. must be set by hand from the Sorts box and altho this method is not very tiresome in comparison with hand composition, yet it is so much more wearisome than the normal work of the machine, that in practice it leads to the most sparing use of such characters. But it has been proven also that the simple insertion of lines is enough for emphasis of the classification words and a uniform tone to the appearance of the type. These deficiencies are, in any case, easy to put up with as they have not prevented other American libraries from following Boston's example. A. Growoll, who was the first publicly to draw the attention of librarians to the advantages of Merganthaler's machine, especially for the making of catalogs, in a private letter mentions four libraries beside the Boston public library, "not to mention more" which have introduced the linotype: the Carnegie library of Pittsburg, Pa., public libraries of Scranton, Pa., Cleveland, O. and St. Joseph Mo. (L.j. 1896, 23:231) This list can be supplemented by the Denver public library. A few statistics in closing. The printing department for 1896-97 printed 12796 titles for the card catalog. The expense runs from 7 to 8 cents for the title in 8 copies including the card board.

As to the expense of catalogs printed in book form only one statement is made which should have representative value: the monthly bulletin (face 20.5 X I3 cm with approximately 34 titles) is issued in 5000 copies for about ($3.) three dollars. Naturally is it in this connection that the monthly accession index is furnished at the astonishingly low price of 25 cents for the year. The machine is only established provisionally in America and costs three thousand dollars.

2. Harvard College library at Cambridge.

The cataloging methods in use today at the Harvard college library can be traced back to the lately deceased Justin Winsor who, twenty years ago, entered upon his new duties at Cambridge after an exemplary organization of the Boston public library.

In the first place the titles are put on slips of a surface 50 X II cm. (Harvard university library accessions); but then they are not, as is usually the custom, divided up into several on one large form and printed on the entire sheet which is cut up into separate cards, but each one is complete in itself and as many copies are struck off with the hand press as the needs of the library require. The separate printing was decided upon because it excludes the issue of superfluous cards which is unadvisable with a printed sheet. For the classt catalog card board is obtained which is divided into two parts by a red line. While the title takes the large lower space, the narrow upper portion is alloted to the classification phrases which are to be supplied by hand after the printing is done. The slips, 4 or 5 of which are required a week for receiving the accessions are issued in lots of fifty. The library requires five copies, on an average, of the seperate cards, two for the author and three for the subject catalog. Each title costs 20 cents; for an explanation of this high price one is referred to the fact that the work is done by the university press, which is compelled to maintain an extensive plant for occasional demands and therefore can not do the work as cheaply as private concerns.

3.John Crerar library at Chicago.

The John Crerar library at Chicago,opened I April,I897,whose province covers substantialy the field of natural science,provides,as well as the Boston public library,for the application of the composition set up for the printing of their cards for the publication of extensive catalogs in books form,but still without using the linotype.The titles are set rather by hand.When the titles are printed the composition is consigned to the electro-deposition, which makes a dull and light copper cliché for each title.Then electro-types are preserved according to running numbers,which are put right under the main classification word.When the administration desires to have a comprehensive accession list or a special catalog printed,it need only give the printer the numbers of the titles in the order in which they are to appear in the new publications.Evidently the thin clichés are to be strengthened for printing by blocks on the back.If there are as yet no experiments made in this direction,they will be started immediately. The process described has the great advantage over the use of the linotype for the same purpose in that the collection of immense masses of metals is avoided,for the thin flat electrotypes require only a modest portion of the weight and room of the heavy deep lead lines.On the other hand it is more expensive.The titles cost in lots of 20 copies,I6 cents and 6 cents for galvanoplastic reproduction.Annually 2000-3000 titles are printed.

Printed titles outside of libraries.

It has not been satisfactorily settled as to who first made the proposal to the publishers that they enclose with every copy a printed title card of each book issued by them so as to save the library the labor of making title cards. At all events, of all the plans, which owe their origin to the deep vexation over the eternal repetition of the same work in countless libraries, this is not only the most fitting, but unfortunately also the most hopeless, and it is hard to conceive from whence its adherents derive their courage to keep agitation alive in the face of the opposition and indifference everywhere and in the face of the plainly endless multiplication of conflicting ideas and notions, which would be united here.

More possible is the related effort to prevail upon the editorial management of serials to issue, as supplements, indexes of separate treatises printed on one side. Here the form of the task gives way of itself and none will make great claims for such titles which serve practical purposes quite as well as references. For those libraries, which extend their cataloguing up to recent articles, every such index is a real gain, which cannot universally be maintained of the title cards which a few publishers have decided to attach to their books. An enumeration of the nearly separate results of all these efforts may be left out of consideration here; only because of the example reference may be made to the familiar typical slips of the Smithsonian Institution and to the results of the indefatigable propoganda of Desiderio Chilovis.

Naturally only such undertakings as are dependant upon one mind and one determination are taken into account. The following cursory glance, which is limited in every instance to the so called direct printed cards, is not exactly qualified to fill the librarian with pride.

If on the one hand we see the efforts in the direct and common interests of all libraries crippled by the almost inconceivable indifference of libraries, on the other hand, undertakings of prime importance, meeting the needs of particular scientific professions show that, to a great extent, it is becoming a custom to dispense entirely with the aid of the librarian for bibliographical needs. At the International conference held in London, July 1896, at the invitation of the Royal Society, which declared itself unanimously in favor of the issue of an index in card and book form of the literature of all natural sciences appearing sine I January 1900, neither the British Museum nor a single English library was represented, and among forty one delegates who took part in the session, only five librarians were counted. Perhaps this is not to the point, but at all events it is greatly to be deplored for the sake of the library vocation, the more because this conference may be of unusual significance in the development of bibliography.

Undertakings in the interests of libraries.

I.The Library Bureau in Boston and the A.L.A.

Central cataloguing which has been striven for and discussed again and again in America since the first assembly of librarians in 1876,i.e.the provision of library clades sufficing for printed title cards from a central office,seemed to be approaching a realization at the beginning of 1894 after a number of fruitless efforts.Two undertakings announce at the same time the fulfillment of the desires cherished so long in vain,so that the editorial chair of the library journal prefaced its notice with the phrase "It never rains,but it pours".

The Rudolph indexer co.in Philadelphia announced for 1 January 1894,the installation of a special cataloging department in New York under Mr.Cutter's direction,which would furnish the libraries with printed titles in the same form as the Rudolph machine demands.The field was not to be limited to the modern literature of America and England,but to be extended to the older books which are indexed in library catalogs.At the same time the Library Bureau in Boston sent out circulars with the same offers except that the title cards were to be of the size customary in America. The Library journal produced examples of both undertakings and from the sort of report said,that in professional circles these plans were regarded already as realities.In spite of this,central cataloging today still rests in the stage of an experiment.

The undertaking of the Rudolph Indexer Co.seems never to have been carried out.The only thing which the next year's issue of the Library Journal mentions,is the explanation of the agent of the company in the January meeting of the New York library club,

that immediately after the speedy return of Mr.Cutler from Europe preparations would begin and in about two months the issues would be started.The company must have dissolved in the same year for the Rudolph Indexer since then has been sold by another firm.

The Library Bureau on the other hand,was in earnest and at the beginning of 1894 began to issue printed cards,only after two and a half years of sacrificial work,rich in disappointments and poor in results,to turn to the publishing section of the A.L.A.with the plea for the latter to take the honorably borne burden off its shoulders.It may be that one special obstacle has hindered the development of the plan and shown itself to be unsurmountable; that is the lack of cooperation on the part of the publishers who, by no efforts,could be brought to the point of recognizing their own advantage in the prompt and complete delivery of their books, instead of seeing in the Bureau an undesirable extension of their free list.This difficulty would disappear as soon as the library association,in whom the publishers could not suspect a business interest,should take the work into its hand.

The Publishing section declared that,with grateful recognition of the services of the Library Bureau and fully appreciating its uncertain position,they were ready to become its heirs.The Bureau had indexed anually in round numbers 1700 works,only about a third of the number registered in the Publishers Weekly,on 5000 cards (for author,title and subject catalog) and sold 59 copies of this catalog to 49 subscribers at a price varying from $37.50 to $52.50, according to the quality of the cards.The high price had prohibited its use by the smaller libraries and by means of a circular letter it was ascertained that the larger institutions,which had decided

to subscribe, could only use one third of the cards provided for their catalogs. The Publishing section could substantially increase the number of subscribers and thereby incite the publishers into active cooperation, if it could start subscriptions for separate portions of the card catalog. It offered to advance to the subscribing libraries from I January, 1897, once or twice a week short lists of the books to be catalogued (advance lists) in which they would indicate those works which they would be likely to purchase. After two weeks the lists were to be returned and immediately the cards in question would be forwarded to them in the desired number and quality, presumably at the same time the book itself was published. So few responses to this offer were received, that it became necessary to drop the plan and wander further from the path of the Library Bureau. The secretary and treasurer of the Publishing section, W. Coolidge Lane undertook the direction of the work, and Miss Nina E. Browne, who had been in charge of the Library Bureau printed cards from the beginning three years previously, was chosen for the cataloguing work. The price of the cards remained the same $7.50 to $10,50 per 1000, and the number of copies struck off unchanged. The income from the sale of the books sent in by the publishers together were almost enough to cover the cost, in connection with which it must not be forgotten that the undertaking at whose disposal the Boston Athenaeum has placed a working room and its entire collection of books, has no expenses for lodgings, heating and lighting, and that Mr. Lane has undertaken the direction of the work as an office of honor. In spite of this condition of affairs, conditions are still such, as the report of the Publishing section itself admits, that any decrease in the number of purchases or any increase in the difficulty of getting the books from the publishers would

probably bring the undertaking to a close. The bill passed 10 February, 1897, concerning the expenditure of the means allowed the Library of Congress, calls for the institution of a special department under the name of "Copyright department". From this office not only a reorganization of the rules for the protection of literary property is hoped, but also-at least American librarians can do this-a blessed efficiency in favor of the libraries of the country.
The fee for copy-righting a book is 50 cents and for 50 cents additional an indorsement of the copyright is posted for the one interested. Now it is customary to send in the whole dollar, just to keep the certificate. The Library journal asks why this should not be printed in a regulated bibliographical form on a standard card and be handed to the holder of the copyright? Thus the cataloguing work would be accomplished for the Congressional library and further printed copies would find ready purchasers in all libraries of the country, so that this arrangement could furnish the office an increse in its profit..
The advantages of this plan are so evident that the most conservative place could hardly remain indifferent to it. But the path from insight into the utility of an idea to its realization would be scarcely less broad and difficult than with us in Europe.

Appendix.

The unusually industrious publishing section of the A.L.A.is coming forward with a new undertaking at present,for which the best results are to be wished.It undertakes the printing of catalog cards for seperate articles in a considerable number of periodical publications beginning with January I893,(Printed catalog cards for articles in current Periodicals and Society Publications).The suggestion came from five large and wealthy institutions of the country,Harvard and Columbia university libraries,John Crerar in Chicago,the Boston public and the New York public library.Together they have compiled the list of periodicals to be analyzed - (The prospectus mentions I84,not less than 59 of which are German) and also undertakes the work of cataloguing.The publishing section obtains the manuscript from them and on its side provides for the printing and sale of the cards which are to be issued twice per month.Because of the plan of the Royal Society already known,they have disregarded in general publications of natural science or of a mathematical character,but have omitted scarcely one of the more important learned societies.If the plan succeeds in gaining the necessary cooperation it will be extended later to more periodicals, government publications,collected works and even for a future selection of journals of all volumes issued since the beginning. The cards are of the size most used in America 7.5 X I2.5 cm. (postal size).In order to accommodate the libraries which use the smaller size (5 X I2.5 cm),the printing is so arranged that 2 I/2 cm can be cut away from the lower edge of the card without injury to the title.The subscription price formerly set is to be lowered in the course of time as the number of subscribers shall permit.

At first ,100 titles can be purchased for $3 or $4.50 according to whether the subscription was for all the bibliography cards or only to the titles of selected publications. A single title costs from 12 to 18 pf.This price includes two copies of each title.If still more copies are desired,100 cards,according to the distinction formerly made,are reckoned at 40 or 50 cents.In addition to the subscriptions of the five libraries mentioned,at least five more subscriptions to the entire bibliography must be obtained in order to place the undertaking on a firm basis.That these will be obtained is scarcely a question.It would be a matter of sincere regret,if the price,high according to continental standards,should prevent our libraries from participating.For with every new subscription the lowering of the price becomes more possible:the A.L.A.wishes to make no profit but to serve the common good.The extension of the indexing to the seperate periodical articles is a demand,which in the long run we shall not be able to evade,and here an excellent opportunity is offered to begin our catalogs with ths extension.The card form chosen by the A.L.A.at all events does not prevent their work from being used by us,for it is not evident why the inventory of periodical articles could not lead a separate existance by the side of the monographs.The number of the titles, which the cataloging of the periodicals first proposed,would make, is estimated at 3098.The $93 or 372m.which an entire subscription would cost,could be afforded by our large libraries in the end. The matter is worth a sacrifice.

The Library Bureau in London.

The Library Bureau in London under Cedric Chivers'direction,a branch of the Boston institution,began I January,1896,the issue of a new monthly bibliography of English literature.At the same time it offered a subscription to a card catalog (likewise appearing monthly) of all books to be indexed in this bibliography at an annual subscription of 3£. The number of works estimated per year in the prospectus was 6000,but 5596 were issued the first year. Altho there were but fifteen subscribers,ordering in all twenty copies,the issue of cards was undertaken and continued twelve months at a great pecuniary sacrifice,but given up when by the close of the year there were no more favorable expectations for the future.

2.Undertakings in the interests of special scientific circles.

(I) The Botanical Supply Company at Cambridge,Mass.

Under the title Bibliography of American botany,the Cambridge Botanical Supply Company published at monthly intervals on cards a bibliography of all new works on American botany.Up to May,1897, 2359 cards have been issued;their monthly average being about sixty. The subscription price was fixed at five dollars per year,payable in advance and later was raised one dollar.The collecting of the material is done by a committee,consisting of the botanists of Columbia University,of the National Herbarium and other institutions,while the publication is done by the company mentioned above under the direction of the committee from the American Association for the Advancement of Science. The issue is limited temporarily to the needs of the alphabetical catalog;an "Edition by subjects"is in course of preperation.

As to the origin of the undertaking it is said, that at the request of the Botanical Congress held in Madison, N.L. Britton, the editor of the bulletin of the Torrey Botanical Club, decided to convert his "Monthly Index to literature relating to American botany" into a card index, and entrusted all business details to the botanical supply company.

(2) The Office of Experiment Stations in Washington.

The office of experiment stations under the Department of Argriculture has been engaged a number of years on a printed card index of the literature published by the agricultural experiment stations and similar institutions in the country; "Subject index of literature of agricultural experiment stations and kindred institutions." Each card bears the title of the article, author's name, a reference to the publication from which it is taken, as well as the experiment station record, and finally at the bottom a brief annotation. While the number at the lower left hand corner specifies the order in which the cards are issued, the numbers in the upper right hand corner indicate the place of the title in the systematically arranged index. Up to date about I3000 cards have been issued including the literature from I888, the date of the establishment of most of these institutions, to I894. The indexing of the earlier work is already done in manuscript and every effort is being made to include the most recent publications. A copy of the index is sent free to the agricultural schools and experiment stations. Besides the bureau has been authorized by law to sell a limited number of copies at a price which merely covers the cost of printing. The price is $2.00 per I000 cards. The division cards in different colors cost one dollar and twenty five cents.

3 The Répertoire Bibliographique des Sciences Mathématiques.

At the invitation of the Société Mathématique de France, a congress of mathematicians of all countries assembled the 16th., of July, 1889, in order to bring to a happy solution the question of mathematical bibliography in which this body had long been actively interested. The organization committee, of which Prof. Poincaré was chairman, was able to submit to the assembly, a very detailed classification of mathematical sciences, which was taken up, with numerous minor changes in three sessions.

Thus the most difficult problem of the conference was solved and with speedy, harmonious work, all the other points of the program were disposed of on the closing day. It was decided to publish a repertorium of all mathematical works, from 1880 up to 1889 inclusive, as well as of their history from 1600 to a stated time, and for the continuation of the work, to issue supplements every ten years. In particular it was further decided to take up the work on applied mathematics only if these had advanced the interests of pure mathematics, and that the astronimical literature which is already indexed in Houzeau and Lancaster's bibliography, was not to be considered. Finally the conference appointed a standing committee with Poincaré as chairman, for superintending the carrying out of their decisions, and decided upon Paris for its central office.

The collection of the material has taken a comparatively short time. As early as 1894, in Gauthier-Villars' list of publications, the first series of cards of the Répertoire Bibliographique des Sciences Mathematiques appeared and in October, 1896, the fourth series. The series costs two francs and contains 100 cards, 14 X 8.5cm., each one of which numbers from nine to ten titles.

Their arrangement within the system is alphabetical.

(4) The Concilium Bibliographicum at Zurich.

At the unanimous resolution of the third international zoological congress at Leyden, an international bibliographical bureau, (Concilium Bibliographicum opibus complurium nationum Turici institutum) was founded in Zurich in 1895 for the registration of all recent zoological literature which is published in periodicals as well as separately. The government authorities, learned societies and private individuals have united to assure its material existance. Herbert Field was assigned the immediate direction of the work to be carried on through regularly appointed assistants and foreign correspondents, under the control of an international commission appointed by the congress. The bureau began with the publication of the Zoologica Bibliographia, which-as a sequel of the bibliographical portion of the Zoologisches Anzeiger-continues the great work, with which the names of Carus Wilhelm Engelmann and Taschenberg are forever associated. But the simultaneous special issue of publications on cards, forms the essential feature of the new undertaking. On first of January, 1896, the bureau extended its task considerably by undertaking, not only the editorial management of the Bibliographia Anatomica by Fischer at Jena, but also the Bibliographia Physiologica, founded by Ch. Richet at Paris, and thus gained the possibility of extending its card bibliography to the recent anatomical and physiological literature, and further the establishment, already announced and later repeated, of a fourth anthropological section under the direction of Rudolph Martin. As soon as thirty five titles are collected the manuscript is sent to the press where it is printed forthwith.

It is hoped of this arrangement, hit upon by a years experimenting, to meet complaints against the delay of the card catalog and to put it on the market more quickly than any other bibliographical publication. Each card bears the Dewey classification number, which is given in exact agreement with the rules of the Institut Internationale de Bibliographie at Brussels, as the bureau on its part has made the Brussels institut give up the card first chosen, 13-1/2 X 9 cm., in favor of the American size, 7-1/2 X 12-1/2 cm., which it adopted. The Zurich card index is to be considered as an essential part of the universal repertorium established at Brussels.

The Concilium Bibliographicum is not a commercial undertaking and according to its statutes cannot make from the sale of the cards more than is necessary to cover its expenses. In the estimate of the price, the mere cost of manuscript, composition and printing which assumes a much more favorable figure, the larger the edition, is separated from the cost of card board, cutting, punching sorting, etc. increasing in the same way with the number of subscriptions. Unprinted cards of white card board are estimated at four francs per thousand, of tough brown and less thick wrapping paper, two and a half francs. For composition, printing etc. the price in francs per 1000 is fixed by dividing 600 by the current number of subscribers. However, under no circumstances would it exceed six francs. This price is made for a systematic or alphabetically arranged series for the entire set of cards. But moreover the Institut offers a large number of different annual subscriptions to separate portions of the bibliography. For example the zoologist who is interested in fauna in their geographical locations, can obtain all the cards on fauna at one franc, on the fauna of France at five francs annually

Also for services in other respects, the Concilium Bibliographicum is placed at the disposal of scholars, as far as it is qualified by its position and regulations. Such unusual orders are estimated according to the amount of time employed; the working hour, or a portion of it, being estimated at I.25 francs. If the cards are provided, they are sold at two francs per hundred. A special arrangement is made in favor of libraries. Those cards which refer to writings which have appeared independently are supplied at two francs per hundred. At the same price, are collected and delivered the cards which index the separate treatises of periodicals which the library specifies to the bureaus. Subscribers to the entire card collection, according to the offer of the bureau, were to profit for their cataloging work as follows: The library will send to the Councilicum a list of its periodicals. Of those cards which refer to the works owned by them two copies-the duplicates most practically in the cheap issue on brown paper-will be sent at a maximum cost of I.20 francs per hundred. The white cards serve as the main stock of the bibliography. They are replaced as soon as the works in question are accessible, by the brown duplicate cards; so in the main bibliography a proper oversight over the literature in the library results; but the white cards issued go into the library catalog.

Closing remarks.

In the preface to this review it is shown that the idea, even in itself most significant, of making printing servicable for current catalog work, could develop to the utmost only where there was centralization of work for its pursuance. Up to this time the indexes of the publications of the universities and schools are the only examples which all the advantages of this fortunate alliance allow to be recognized. As to its value, there is unanimity. Every library which is in a position to make full use of both Berlin publications for example, can estimate the gain which accrues to it from this work performed at a central office with an annual expenditure of hundreds of hours of work. It is a still more desirable advantage, that thro it, the uniformity desirable especially for the entire mechanical side of cataloging has found a place at least in the treatment of one branch of literature. But these instances cannot be looked upon as typical solutions of the problem since they will scarcely compensate for the great difficulty of centralizing the daily work.

The small portion of literature here indexed covers only a very limited part of the book trade, because of which the demand of the public makes itself felt late according to experience. Moreover they come into possession of the library at the close of the academic or school year in a great mass, so that the title coming from the central office a couple of months afterward, comes in plenty of time. It is otherwise with all other acquisitions of the library, whose speedy preparation is pressingly desired in the interest of the public as well as for the transaction of business, It could easily, be told how great-not to speak of the ideal gain-would be the material advantage for the library of a country or state if each one

received, furnished in sufficient numbers by a central office at the same time as the appearance of the publication or at latest two weeks afterward, the titles catalogued according to bibliographical principles, so that they could provide for all their catalogs in this way. This is the goal never to be lost from our sight, which must and will be realized.

At present as the preceding review has demonstrated, it has approached only a little nearer in spite of the complaints raised hundreds of times for so many years about the enormous waste of time and strength which lies in so many libraries doing at the same time one and the same work, which could be done once for all.

Of the undertakings cited in the second chapter only that of the American Library Association is regarded here, and it remains standing far from the goal without having the prospect of ever reaching it with their unwelcome basis -and the opposition of the author never would be removed- But the work of the libraries themselves offers no more favorable picture. Of the three general accession lists with which we have become familiar, only the French keeps in view the direct application of their titles on the part of the institutions interested, but since it appears only at intervals of a year, it is far from useful in furnishing them relief in their cataloguing work. Further we see English, French, Italian and Norwegian libraries spending years at their task and publishing periodically according to all the rules of library science, prepared indexes of all new literary productions of their respective countries, every time solely for the use of a single library. Of the Norwegian printing not even that can be said.

On the whole there is only one institution which has so regulated the establishment and distribution of printed titles from the beginning so that it would be useful at the same time to other institutions;that is the Imperial library at Berlin.If previously the result has been less than they expected and more speedy issue of the shipment recently introduced has hardly led to a wholly desireable issue,it is due to conditions,whose mastery lies outside the province of the administration,above all to the irregular and late receipt of the copy-tax volumes.With this partial failure still the proof of the insolubility of the problem is not forced upon us.Rather does the example teach the foreign libraries working under much more favorable conditions in this appointed direction but entirely in vain that we ourselves,if we possess a uniformly good law of copy-tax and a central library,must adopt another mode of procedure to reach the goal.All the literary productions of our country,aside from private publications,government publications and daily papers stream together into the center of the book trade as soon as they come into the market.The impelling force is the all-powerful interest of the publisher,which is as strong as it is inexhaustible.What then is more to the point than to remove thither the working field of an undertaking whose first and most vital question is the speedy disposal of the most recent publications of the book market?

BOUND BY
HNM

UNIVERSITY OF ILLINOIS-URBANA
3 0112 079824337